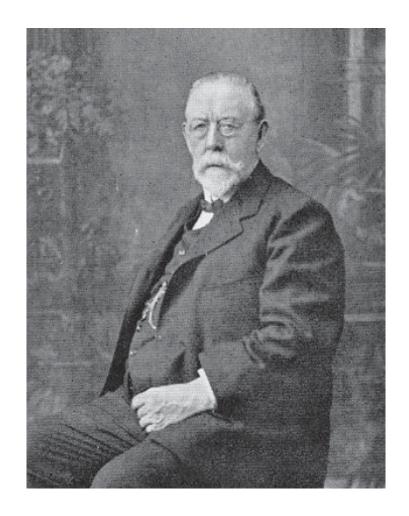
MAGICAL TITBITS BY

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WITH ILLUSTRATIONS BY

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PREFACE

WHEN Later Magic first saw the light, it was, as therein stated, my hope and intention to follow it up with a further volume on similar lines. In due course I began the work, but advancing age and the pressure of other engagements have compelled me to abandon it.

The first part of the present volume is devoted to the description of a few items (all, I venture to think, of some special interest) which would otherwise have found a place in the work now laid aside. In the second part I have reproduced, in more permanent shape, my articles on the many ingenious inventions of my old friend Hartz, which have hitherto only been accessible in serial form.

For the sake of completeness, a few "Hartz" items already dealt with in Later Magic have been included in the present volume.

LOUIS HOFFMANN

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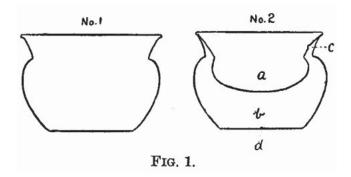
L'ENVOI.

PART I MISCELLANEOUS TRICKS

THE RICE AND WATER TRICK

There are several versions of this trick. It is popularly known by the name of the Chinese Rice Bowls; but this is a somewhat incorrect description. The trick in its original form is a speciality of the Indian conjurers, or, rather, of some of them; for Indian magic takes various shapes, according to tribe and locality.

An excellent account of the trick in its Oriental form, or only so far modified as to meet Western conditions of performance, was contributed by Herr Carl Willmann to the now defunct German serial, *Die Zauberwelt*, and I cannot do better than quote, in effect, his description.

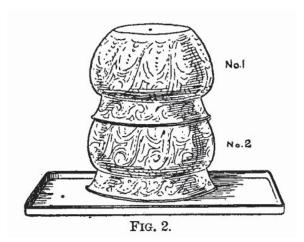


The bowls used by the Indian conjurers are of thin brass (such as is used by the metal workers of Benares) and of the shape shown in section in Fig, 1. That which is marked No. 1 in the diagram is a plain, ordinary bowl; but the other, No. 2, is of a less simple character. Its depth, internally, represents only one-third of the total space, which is divided by a false bottom, as shown in the diagram, into two compartments; the upper, a, being of about half the capacity of the lower, b. At the points c and d are minute holes. The mouth of bowl No. 1 is a shade larger than that of No. 2, so that when turned mouth to mouth the one shall slightly overlap the other, thereby preventing the liability to slip sideways which would arise if both were of exactly the same size.

In preparing for the trick, bowl. No. 2 is immersed in a larger vessel of water until the compartment b has completely filled itself, the test of this being that air bubbles cease to appear at the surface of the water. Before taking it out of the larger vessel, the operator closes the hole c by pressing a finger upon it. He then takes the bowl out, holding it upside down, dries it inside and out with a cloth, and plugs the hole d with a pellet of soft wax. The finger may then be removed from c. If the bowl is properly filled, and the hole d duly plugged, there will be no escape of water, even though it remain inverted.

These preparations having been made beforehand, the performer comes forward with the two bowls on a tray. Both are turned upside down, the one above the other: No. 1 uppermost, as shown in Fig.

2. Putting down the tray, he takes the bowls, one in each hand, and clashes them together, mouth to mouth, after the manner of a pair of cymbals, producing the corresponding vibratory sound, though, as a matter of fact, this is wholly produced by bowl No. 1, the liquid contents of No. 2 keeping that bowl practically silent. The spectators, seeing the bowls so freely handled, are perforce persuaded



that they are empty; the more so that the performer, in the course of his manipulations, allows them a momentary glimpse of the interior of each. He may even, in a casual way, hand No. 1 for examination, meanwhile leaving No. 2 turned mouth downward on the table or tray.

Replacing No. 1, mouth upwards, on the tray, he to fill it with rice. He levels the surface with his wand, or any other convenient instrument, and pours back any surplus rice from the tray into the receptacle whence it was taken. He then turns bowl No. 2 over No. 1, mouth to mouth, and brings them forward between his hands, lifting No. 2 for a moment as he approaches the spectators, that they may see for themselves that No. 1 is quite full of rice. Again bringing; the two bowls mouth to mouth, he returns to his table, and in the moment during which they are screened by his own body, reverses them so as to bring No. 1 uppermost, and places them thus reversed on the tray. With a wave of his wand he commands the rice to increase and multiply; and a moment later lifts the upper bowl and shows that it has done so, for the internal capacity of No. 2 (which is now undermost) being only about one-third that of No. 1, the rice naturally overflows, the effect to the spectator being that it has largely increased in quantity. The performer again levels it with his wand, letting the surplus rice fall on the tray.

Again he comes forward, holding in one hand No. 1, empty, and in the other No. 2, full of rice. In view of all he inverts No. 1, and covers No. 2 with it. In returning to his table he once more reverses them, bringing No. 2 uppermost, and places them in that position on the tray. This done, he secretly removes the wax pellet from the air hole d, whereupon the water begins to flow through the hole c into the lower bowl (No. 1). After allowing a sufficient interval, duly occupied by patter, for the water to pass from the one vessel into the other, he lifts No. 2, and shows, apparently, that the rice has now changed into water; for the former, being of the greater specific gravity, sinks to the bottom, while the two together just fill the bowl. As a proof of the genuineness of the transformation, he pours a portion of the water from No. 1 into No. 2, and back again. Again he pours from No. 1 into No. 2, and this time purposely causes the water to overflow. This is easily managed, there being just twice as much of the fluid as would suffice to fill the shallow upper cavity of No. 2. "Dear me!" he says, "this is rather awkward. I certainly ordered the rice to increase and multiply, but I didn't intend

the command to apply to the water also. That's the worst of magic. When you once set these abnormal powers in motion, you never quite know how far they will go. I must stop this, and pretty quick too, or we shall have an inundation." So saying, he places No. 1 upon the table, waves his wand over both bowls, and says, in commanding tones, "Stop!"

But the command is ineffectual. On his again pouring water from No. 1 into No. 2, it overflows rather more freely than before; and the performer explains that so long as a single drop of water remains in either of the bowls, the charm will probably continue to work. He accordingly pours the mixed rice and water (professedly water only) into some larger receptacle. Taking a cloth, he wipes each bowl dry, inside and out. He then inverts them, one upon the other, on the tray as before, and carries them off, or has them carried off by his assistant.

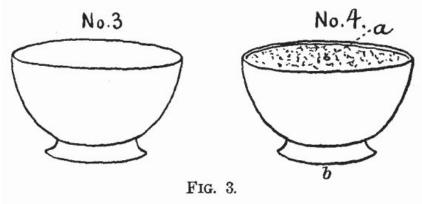
Herr Willmann suggests, as an effective combination, that the water which appears in the bowls be made just previously to disappear from a glass decanter, placed upon a cigar-box duly adapted to receive the fluid, and the vanished rice found elsewhere. This would be very easily managed, but the trick is so complete in itself, embodying as it does three successive surprises, that I am inclined to think it would lose, rather than gain, by the addition.

The next version of the trick may be dismissed in a very few words, being but a very poor imitation of the original. It was presumably devised by some one who had never handled the genuine bowls; but, knowing the trick by hearsay (possibly from "travellers' tales"), reinvented it for himself, after a makeshift fashion.

The bowls, which for distinction's sake we will in this case call Nos. 3 and 4 (Fig. 3); are of earthenware, and in size and shape not unlike the slop-basin of the family breakfast-table. No. 3 is unprepared, but over the mouth of No. 4, or rather, just within it, is cemented a tin plate, with a small hole, a, in its centre, and there is a similar hole, b, in the bottom of the bowl. To the upper side of the tin plate a coating of grains of rice is cemented. The two bowls are, as in the original version, brought in on a tray, upside down, No. 4 having been beforehand filled with water, and the hole in the bottom of the bowl duly plugged. The performer shows the inside of No. 3 only. He fills this from a paper bag, covers it with No. 4 (inverted), and turns them over. When No. 3, which is thus brought uppermost, is removed, the rice lies heaped on the flat top of No. 4. The performer levels it with his wand; thereby sweeping off all save the small amount cemented to the upper surface of the tin plate, which, however, gives the bowl the appearance of being still full. A repetition of the "turn-over" process and the removal of the plug from the second hole causes the rice to disappear, and the now lower bowl (No. 3) to be found filled with water in its place.

The experienced reader will doubtless have "spotted" the weak point in this version, namely, that not even a glimpse of the (supposed) concave side of bowl No. 4 can be allowed at any stage of the trick. A well-known American performer, the late Professor Balabrega, met this difficulty in a very ingenious way. He began by exhibiting two unprepared bowls, and after showing unmistakably that they were innocent of mechanical contrivance, placed them mouth to mouth, but in so doing introduced a palmed lemon between them. Then, exhibiting another lemon, he ordered it to pass within. Lifting off the upper basin with the right hand, he with the left took out of the lower and exhibited the one he had just previously introduced. Meanwhile, the right hand, still holding the upper bowl inverted, lowered it for a moment to the servante, and there exchanged it for the trick bowl.

In a later and better version (the one now generally exhibited) the trick is performed with unprepared bowls; or, rather, bowls prepared in such a way that no trace of preparation is left at the close of the trick. The material of the bowls is in this case what is known as "opal" glass, i.e., glass which is milk-white and semi-opaque. Their rims are ground perfectly flat, so as to fit exactly, the one upon the other. They should each be made with a foot, of the same shape in fact as the bowls depicted in Fig. 3; the projecting rim at the base enabling them to be handled more conveniently. With them is used a disc of clear glass, usually edged round with white enamel to make it match the better with the bowls, and of such a size as to exactly cover the bowl.



To prepare for the trick, one of the bowls is filled to the brim with water, and the brim itself moistened, after which the glass disc is laid upon it. The bowl may now be inverted without any fear of the water escaping, the glass plate being kept in position by atmospheric pressure. This bowl we will call No. 6, and the unprepared one No. 5. Both are turned upside down, and the two brought in, side by side, on the usual tray.

Picking up bowl No. 5, the performer shows that it is empty. He then fills it with rice, usually from a paper bag, and covers it with No. 6; then bringing forward the two together, and, in replacing them on the tray, working the "turn-over" as already described. When the uppermost bowl is removed, there is the usual overflow of rice, the previous contents of No. 5 now lying on the surface of the glass plate. These are swept off, the empty bowl being used for this purpose, and No. 5 is replaced on No. 6; but this time there is no turn-over. At this point the performer, taking a glass tumbler, fills it with water and "vanishes" it by any of the familiar methods, at the same time commanding the water to pass into the covered bowl.

After a little more patter, No. 5 is lifted off, and with it the glass plate. These are laid upon the table, after which the bowl is restored to its normal position, and the performer brings it and the other bowl forward, one in each hand, No. 5 empty, No. 6 full of water. As a finish he pours the water (professedly that just before made to disappear) from bowl to bowl, but in this case without any increase of its quantity.

It may here be mentioned that if the bowls are not too large (about six inches in diameter by three in depth will be found a convenient size), they may be held together between the fingers and thumbs of the two hands, and waved up and down, professedly to assist the transformation in progress, and under cover of this movement they may be reversed without difficulty, even under the very noses of the spectators.

The glass plate is now usually made with a small lug at one point of its circumference. This in use is kept to the rear. When, after the rice has been exhibited, the performer again covers it with the empty bowl in order to level it (really sweeping it off altogether), he nips this lug between finger and thumb, and draws off bowl and plate together, laying them upon the table or tray. A moment later he lifts the inverted bowl and places it once more upon the lower bowl, before proceeding to show that the rice is transformed into water. The plate, meanwhile, is completely hidden by the super-incumbent rice.

For a minor improvement in the appliances used, conjurers are indebted to Mr C. O. Williams, of Cardiff. Instead of having the plate made of clear glass with an enamelled edge (which is very apt to chip), he has it of opal glass, like the bowls themselves. Bowls thus fitted may be had of Messrs Ornum, to whom Mr. Williams presented the idea.

All these modern versions, however, seem to me to fall short of the Indian original, the apparent increase of the water being, to my own mind, the most surprising feature of the trick. The only weak point in it is the necessity of using a bowl which obviously will not bear close inspection. This, however, is a minor matter. Even in the case of a drawing-room show, in which the apparatus used by the performer is most exposed to inconvenient scrutiny, if the trick has been preceded by one or two others in which the appliances used have been left in the way of examination (this, by the way, is much better than offering them for that purpose), no one is at all likely to question the unpreparedness of the bowls. If, however, the performer feels any anxiety on this score, it is perfectly open to him to start with two actually unprepared bowls, using the expedient of Professor Balabrega to change one of them, at the right moment, for the trick bowl. I should, however, be inclined to substitute for the lemon a ball of red rubber, with a hole in it, loaded into the ball from the tip of the right thumb. The ball might rest till needed, hole outwards, in the vest pocket, or just within the opening of the vest.

The Indian bowls may be had of Herr Willmann, and therefore, I should imagine, also through English dealers. The cost of the pair (the plain and the faked bowl) is about twenty-five shillings. The addition of a second plain bowl (if the above suggestion be adopted) would naturally involve a proportionate increase of price, but it would be well, worth the small extra outlay.

THE VANISHING RICE

This is a trick of Japanese origin. It is too quickly over to be worth independent exhibition, but it works in very effectively either as an introduction or an addition to the trick last described, or to any other in which rice plays a part.

In effect it is as follows: The performer, first drawing up his sleeves, takes a handful of the rice and pours it two or three times from hand to hand. Presently he brings the hands together, palm to palm, and rubs them gently one against the other. When they are again separated, the rice has vanished. Once more the hands are brought together, gently rubbed, and the right hand closed. A plate or a sheet of paper is held underneath, when the missing rice pours from the hand upon it.

The secret lies in the use of a little bag, about one and three-quarter inches square, preferably of flesh -coloured silk, and closed at the mouth (after the fashion of the bag used for producing sweets from a handkerchief) with a couple of pieces of clock-spring or whalebone, in such manner that the mouth is normally kept shut, but is forced open when pressure is applied to the opposite ends of the springs. This is suspended by a gut loop, round the forefinger of the right hand, so as to hang, mouth upwards, midway between the first and fourth fingers. The loop should be attached to the bag at the centre of the mouth, on the side which in use is next the palm.

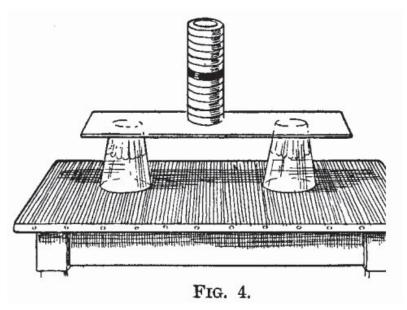
With this preliminary explanation, the working of the trick will be almost self-evident. The bag being duly looped over the finger, the performer takes up with the same hand a tablespoonful or so of the rice, and pours it once or twice from the one hand to the other. At first this is done, so to speak, anyhow, so long as the inside of the right hand is not exposed; but when the rice is being poured back from the left hand for the second time, the right hand receives it after a particular manner, viz., the hand is held fist-wise, thumb uppermost, with the fingers partially closed, the space between the thumb and the curved finger forming a sort of cup. This position of the hand enables the performer to exercise the needful pressure on the ends of the springs. The mouth of the bag opens, and it is into this that the rice is actually poured. The pressure being relaxed, the bag closes; the hands are brought together; the little bag is tilted over to the back of the right hand, and both palms are shown empty. In the act of again bringing the hands together, the bag is tilted once more into the palm, and the rice is reproduced as above described.

The trick has the advantage of being very little known. The use of the loop to suspend the bag is an addition of my own, and I venture to think that it is a material improvement. In the original version the bag is merely palmed, and consequently the hands cannot be shown simultaneously empty.

TAO LI TAO, THE CHINESE MYSTERY

What may be called the standard working of this startling trick is described in Messrs Hamley's catalogue as follows:-

"The performer shows round to the audience thirteen wooden draughtsmen. Twelve of these are yellow, and the remaining one black. The performer places two tumblers about nine inches apart, and across the top a piece of glass. On this he places six yellow draughts-men, then one black one, and then six more yellow, one on the top of the other. At the word of command the black draughts-man leaves the middle of the pile and goes to the top. Immediately the performer gives the men to be examined and counted by the audience. The, trick may be varied by the black 'man' going from the top to any other position in the pile the performer commands." (See Fig. 4.)



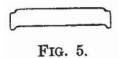
Before proceeding to explain the trick, it may be well to supplement the above description by stating that the so-called draughtsmen are of exceptional size, being each three inches in diameter and nearly an inch in depth. They are made of hard and heavy wood, so as to possess considerable inertia.

The secret of the supposed transposition lies in the use of two bands of extremely thin steel ribbon (scarcely thicker than paper), each bent into the shape of a circle, with the ends overlapping but not joined. Each band is equal in width to the depth of one draughtsman, and just long enough to encircle it. One of these is enamelled black and the other yellow. To the side of the band farthest from the opening, in each case, is attached a black silk thread. This is led away, with due regard to direction,

to the hands of an assistant behind the scenes. The bands themselves are hidden at the outset behind some object or objects on the table.

After the draughtsmen have been handed round for inspection, the performer takes them back to the table and begins to form his pile. In so doing he slips the yellow band over the black draughtsman, and the black band over one of the yellow ones. It is this last (professedly the black one just previously examined) which is placed in the centre of the column. On it are piled five more, and on top of all the black draughtsman disguised as a yellow one. The opening of the band is in each case to the front. At the word of command the concealed assistant gives a sharp pull upon the two threads. The bands are drawn off the draughtsmen they respectively covered, the effect to the eye of the spectator being that the black and yellow draughtsmen have changed their relative positions in the pile.

To any one who has not tried the experiment, it seems incredible that the two bands could be jerked away without upsetting the column; but, as a matter of fact, if the pull be deftly made they slip off so cleanly that their removal does not create the smallest disturbance. For greater security in this particular, however, I would suggest that the draughtsmen be shaped with one side slightly hollowed out and the other shouldered to correspond (as shown in section in Fig. 5), the concave side of each, in forming the pile, to be placed downward. The draughtsmen would thus fit one within the other, and the risk of side-slip would thus be still further minimised.



As an occasional variation, I would suggest that the draughtsmen be formed into two piles, of six or seven each, side by side on the glass plate, the audience being invited to say at what height in the first pile the (supposed) black draughtsman should be placed. The disguised black draughtsman being placed at the same height in the other pile, the two would apparently cross over from the one pile to the other with good effect. It seems to me, by the way, that having (duly screened upon the table) a couple of spare draughtsmen, each

already encircled by the appropriate band, and "ringing" them at the proper moment for two of the unprepared ones, would be a preferable arrangement, as being easier to work than the plan adopted in what I may call the authorised version.

BALLOONS FROM A HAT

The special virtue of the tall hat, from a conjurer's point of view, is the paradoxical fact that so many things can be got out of it which could not possibly be got into it. One of the most effective surprises in this direction is the production of three or four balloons, of the toy-shop variety, each considerably larger than the hat itself. There is no real difficulty about the trick, but to ensure success it needs careful preparation beforehand, and some amount of address in presentation. For each balloon produced two are actually required. The one seen by the spectators is a balloon of thin rubber, a foot or thereabouts in diameter. The other is a smaller one, two or three inches across; the smaller, in fact, the better. For their preparation the performer will require a supply of tartaric acid and bicarbonate of Soda in powder. Both of these are very cheap, and a pound of each will supply material for many performances.

The first step is to make a saturated solution of tartaric acid. To do this, take a pint of water and add the acid to it, a spoonful at a time, till it will dissolve no more. Pour a couple of tablespoonfuls of this solution into one of the smaller balloons, and secure the mouth tightly. The balloon thus prepared is to be introduced within one of the larger balloons in company with a couple of tablespoonfuls of the bicarbonate of soda, slightly moistened. The remaining air in the larger balloon is then to be expelled and the mouth secured so as to be air-tight. The balloon, in this condition, occupies a very small space, and three or four such, held together by a rubber band, may be loaded into a borrowed hat. A sharp pressure on the outer balloon, prepared as above, causes the inner balloon to burst. The acid solution mingles with the alkali, and the resulting carbonic acid gas causes the outer balloon to expand rapidly to its utmost dimensions.

The chief point in manipulation is to hold the hat in such manner as to screen the balloon during the developing process, and so to produce it, so to speak, full grown.

The trick may on occasion be worked with a "bowler" instead of a "chimney-pot," and with even better effect. Best of all, perhaps, is an "opera" hat. This, in its folded condition, and with a balloon tucked comfortably away under each of the springs, is brought in by the performer when he first comes forward on the stage, and laid on, say, the seat of a chair, while he proceeds with his performance. At a convenient moment he picks it up again, expands it, and in due course produces the balloons.

Other methods have been suggested for the combination, at the proper moment, of the two reagents, but it is doubtful whether either of them is in practice found more effective than the simple plan above described.

TO DISCOVER AND POCKET

(BEFORE ASKING ANY QUESTION)

THE CARD THOUGHT OF BY A SPECTATOR

The above sounds like the description of an impossible feat, but it is, notwithstanding, as our American friends say, "cold fact," at any rate so far as the effect on the spectator is concerned. The honour of having devised it belongs to my ingenious friend, Mr C. O. Williams, before mentioned. I believe that I was the first person to whom he communicated it, and I am pleased to take this opportunity of giving him the credit due to his clever invention; the more so that it has been wrongfully claimed in other quarters.

The trick is performed as follows: The performer asks a spectator to shuffle the pack, and having done so, to note any card he pleases, and the number at which it stands from the top. He then takes the pack into his own hands, and places it behind his back, at the same time gazing in the face of the chooser as if to read his thoughts. He tells him that he is about to pick out the card thought of and put it in his pocket. This he apparently proceeds to do, but as a matter of fact, it is the bottom card which he takes, and (showing its back only) places it in his pocket. Professedly, he leaves it there; but again "things are not what they seem." When he has got it fairly within his pocket, he palms it, brings it out again, and places it secretly on the top of the pack.

The trick being now supposed to be done, he is free to ask the person who made the selection at what number from the top the card he thought of stood. The answer is, we will suppose, "Eleventh." "Good!" he says. "I will show you, in the first place, that it is no longer there." So saying, he counts off ten cards, and, showing the eleventh, asks the chooser to say whether that is his card. As the numbers have all been advanced by the card placed on the top, the reply is, naturally, in the negative. Meanwhile, the performer palms off the next card (which is the original eleventh), and a moment later, plunging the hand into his pocket, produces it thence, as being the same he had (professedly) placed there a few moments earlier.

The effect of the trick, in good hands, must be seen to be believed. It has all the appearance of a genuine experiment in thought reading, and even an expert, seeing it for the first time, is likely to be as much puzzled by it as the merest outsider.

A NEW PURSE TRICK

For this item also conjurers are indebted to the inventive genius of Mr Williams.

The effect of the trick is as follows: The performer takes his purse (one of the "bag" description) out of his pocket, and empties the money it contains upon the table. Borrowing a coin of good size (say a half-crown or five-shilling piece), duly marked by the owner, he places it in the inner pocket of the purse. This is then closed, and the purse also. The purse, after being two or three times carelessly tossed from hand to hand, is dropped into a hat. The performer declares that the coin has left the purse and is now in the possession of a spectator, whom he indicates. He proves his assertion by producing the coin from the victim's pocket. The purse, being examined, is found empty.

For the purpose of the trick the performer must have two purses exactly alike. One of these he prepares by cutting away the stitches along the bottom both of the outside and of the inner pocket. A few coins of any description are inserted through the opening thus made into the inner compartment, and the purse placed, bottom upwards, in the left pocket. The other purse, empty, is placed in a pochette or elsewhere, so as to be instantly get-at-able.

To show the trick, the performer takes the prepared purse out of his pocket, pinching its lower edge to prevent the escape of the coins therein. Opening the mouth, he pours these out upon the table; this very natural action insensibly impressing the spectators with the idea that the purse is the one in ordinary use by the performer, a common, everyday article. After a coin has been borrowed and marked, he drops this into the inner compartment, which he closes, after which he likewise closes the mouth. A moment later the coin is allowed to slide out through the manufactured opening into his palm, the purse lying over it. He then makes use of the dodge employed by the purse-faker on the race-course, i.e., throwing coin and purse together from hand to hand, the former underneath and concealed by the latter.

Presently he drops the purse (without the coin) into a hat, which stands in readiness on the table. As the coin has remained palmed in his hand, it is an easy matter for him to extract it from the pocket of any spectator he pleases, first leading up to the production by the assertion that the victim has already got it.

While the coin is being identified, the performer has ample opportunity to get hold of, and palm, the unprepared purse. Dipping his hand into the hat, he brings out and hands for inspection, professedly, the purse with which he has worked the trick, but as a matter of fact, the one just previously palmed the faked article remaining in the hat, to be removed at a convenient opportunity.

A SILK HANDKERCHIEF CHANGED INTO A FLAG

This differs from most tricks of the same class in two particulars: first, that the change is practically instantaneous, and secondly, that no apparatus, save the flag and handkerchief themselves, is employed. The performer starts by exhibiting the handkerchief four-square, his hands being otherwise empty. The handkerchief is crushed between the hands. When they are again moved apart, it is seen to be transformed into a flag, the hands being again shown otherwise empty.

The flag used is a Union Jack of very thin silk, measuring thirty-six inches by eighteen. In one corner of it is a "patch" pocket of the same material, three inches square. The mouth lies along one of the narrow sides of the flag, and in each of its hems is a piece of whalebone, keeping the mouth closed, save when pressure is applied at the opposite ends.

The handkerchief, which in colour matches the blue portion of the. flag, is twenty inches by fourteen, and in one corner of it a patch pocket measuring four and a half inches by three. The opening in this case is on the side opposite the outer edge, in the direction of the length of the handkerchief.

The flag is prepared for the trick by being folded in "accordion" pleats three inches wide, first in the direction of its length, and then the other way, in such manner that the pocket shall be on the outside. The little packet thus formed is then tucked into the pocket of the handkerchief, the mouth of the flag pocket being made to correspond with that of the handkerchief, and lying next to the surface of the handkerchief itself.

When the handkerchief is at the outset shown four-square, it is so held that the pocket (which is on the side remote from the spectators) shall be covered by the fingers of the right hand. The performer then takes the handkerchief between his hands in such a way that the mouth of the pocket shall be towards the spectators, with the bulk of the handkerchief above the bands. He then with the fingers of the right hand works the handkerchief into the pocket of the flag, and when it is half-way in, works the flag out, keeping it well under cover of the fingers. When the handkerchief has completely passed into the flag pocket, he grips the flag (by two fingers in the pocket and the thumb outside), and with a swing lets it unfold itself; immediately afterwards catching the opposite corner in the left hand, and showing front and back.

The feat is one demanding considerable address, but, neatly worked, produces a complete illusion, the handkerchief disappearing, and the flag appearing, in effect, simultaneously.

THE CHANGING HANDKERCHIEF BOXES

This pretty little trick is the invention of Mr Gilbert, of Chester.

The apparatus is of the simplest, consisting merely of a couple of cardboard boxes, about two and a half inches square, and a little more than an inch deep. Each consists of a drawer sliding in an outer case, the whole papered over after the fashion of an ordinary matchbox. The two boxes are exactly alike in appearance, save that the one has a square patch of blue paper, and the other a similar patch of red paper, pasted in the centre of its under side. With these is used, unknown to the spectators, a piece of stiff cardboard, papered like the boxes themselves, and of the same area, but having in the centre of one of its sides a duplicate of the blue patch, and on the other side a duplicate of the red one. Two small silk handkerchiefs, one red and one blue, complete the apparatus.

The boxes and handkerchiefs rest at the outset on the performer's table. Palmed in his left hand, he has the piece of card above mentioned, with the red patch outermost, and the blue therefore next the palm. His first proceeding is to hand the boxes, in a casual way, for examination. When these are given back, he offers the handkerchiefs, also. While these last are being inspected, he picks up the box having the red mark at bottom, and brings it over the card in the left hand. Then taking the two together in the right hand, the card (with the blue patch now outermost) covering the bottom, he calls attention to the box as being the one with the blue mark (as it appears to be), and forthwith inserts the handkerchief of that colour within it. In replacing this box upon the table, he palms off the cardboard fake, which he then applies, red patch outwards, to the bottom of the blue-marked box. Showing this as being the red-marked one, he deposits the red handkerchief within it.

Requesting the audience to bear in mind that, as they have seen, each handkerchief has been placed in the box bearing its own colour, he hands the two boxes to be held by two different spectators; in so doing, however, secretly reversing their relative positions. The two handkerchiefs are then ordered to change places, and on opening the boxes it is found that they have done so. The red handkerchief is found in the blue—marked box, and vice versa.

It seems to me that this trick, good as it is, might be improved in one or two particulars. I submit my suggestions for what they may be worth.

In the first place, I should use ordinary safety matchboxes (at the outset filled with matches), as being less suggestive of preparation than any special box, however innocent-looking. One of these should have on the centre of its under side a red wafer, and the other a blue one. A further supply of similar wafers should be on the performer's table. To complete his preparations, he should cut away the top and bottom of a third matchbox. These, which are usually so nearly alike as to be practically undistinguishable, we will call the false bottoms. One of them the performer should at starting have

palmed (the outside next the palm), and the other placed in a pochette or elsewhere so as to be readily get-at-able.

The performer begins by picking up one of the boxes, say, the one which (unknown to the spectators) bears the blue wafer. He empties out the matches, and then proceeds to mark the box by sticking on the bottom of it one of the red wafers; first, however, secretly bringing over it the palmed false bottom, which therefore in reality receives the wafer. Having thus professedly marked the box red, and placed in it the handkerchief of that colour, he lays the box down, wafered side downwards, but without the false bottom, which he gets rid of after any fashion he pleases, palming in its place the other false bottom. The same operation is then repeated with the second box (the red), this being ostensibly marked with a blue wafer, and the blue handkerchief placed in it.

So far, all is plain sailing. The spectators believe (contrary to the fact) that, of the two boxes on the table, the left-hand one, we will say, is the blue—wafered box, and that on the right the red-wafered one. The magical effect of the trick mainly depends on their continuing in that belief. To strengthen their conviction proceed as follows: While delivering your patter, take up a position slightly in front of the table, so that you have to turn towards it in order to pick up the two boxes. In doing so, take the one in the right hand between the tips of the first and second fingers, and the other in the left hand between the first finger and thumb. Under cover of the return movement towards the audience, "change" the two boxes as you would a couple of cards (see Later Magic, p. 501). Hand the boxes to a couple of spectators (each of whom, in consequence of the change, receives the box marked with the colour he expected) and in due course produce the handkerchiefs.

THE DEMON DIGITS

This novel and effective trick is a recent invention of Herr Adolf Blind (Magicus) of Geneva.

Upon an easel, of a size suited to the place and conditions of the performance, rests a blackboard, or, Ito speak more precisely, a board covered with black velvet. Across this board, half-way up, is screwed a fillet of wood, an inch or so in width, and of a light Colour. On this rest, side by side, and about three-quarters of an inch apart, three cards, of the size of playing cards, and backed with some appropriate pattern. These bear respectively, in bold figures, the numbers 1, 2, and 3. Removing the cards from the board, the performer hands them for inspection, and when they are returned replaces them in the same relative positions (1, 2, 3), but now with their backs outwards.

His next step is to hand to one of the spectators a slate and a piece of chalk, and to invite him to write down any number he pleases, consisting of the digits 1, 2, 3. He writes, we will suppose, 2, 3, 1. The performer orders the three cards to form that number, and on his again turning them face outwards they are found to have done so, the numbers appearing in the desired order.

Again reversing the cards, just as they stand, he invites some one else to write down the three figures in a new order, and again the cards are found to have arranged themselves as desired. The process might be repeated ad libitum, though, as every expert knows, it is not wise to grant encores too frequently.

The method by which this surprising result is produced is as simple as it is ingenious. Against the upper half of the board, at right angles to the cross fillet, and with their lower ends resting upon it, are fixed four thin slips of wood three-quarters of an inch wide, a quarter of an inch thick, and of the same length as a card. The space between them in each case forms a compartment just the width of a card. The slips are covered with black velvet, like the board itself, and, by artificial light, the slight projections they cause are quite invisible.

To complete the apparatus, two additional sets of three cards each are employed. These, like the others, bear the numbers 1, 2, and 3 respectively, but differ from them in the fact that they are backed with black velvet. To prepare for the trick, two of these are beforehand placed, face inwards, in each of the three divisions of the board. In the left-hand division (as viewed by the spectator) the innermost of the two cards bears the figure 3, and the outermost the figure 2. In the central division the inner card is a 3 and the outer a 1; and in the right-hand division the inner card is a 2 and the outer a 1. On these are placed, in proper order, the three unprepared cards.

We will suppose that the number which it is desired to produce is 3, 2, 1. In such case the performer turns simultaneously all the three cards in the first division,

the unprepared card only in the second, and the two front cards in the third. This must be done smartly, without hesitation or fumbling, the effect to the spectators being that the performer has merely exposed

the three cards just previously examined. When the number produced has been verified, he turns the cards back to their normal position, and is then prepared to repeat the trick.

THE ACROBATIC CARDS

I insert this trick at this point on account of its curiously close resemblance, in principle, to the one last described. It is the invention of Mr Gilbert, already mentioned. I have no reason to suppose that either of the inventors had any knowledge of the other, or of his trick, but their minds seem to have travelled on precisely parallel lines.

The performer's first step is to force a couple of cards, say, the knave of spades and the knave of diamonds. He asks the drawers to exhibit the chosen cards to the company, after which he delivers patter to something like the following effect: "I am glad, ladies and gentlemen, that your choice happens to have fallen on these two cards, because the knaves are the most active cards in the pack, and the knaves of spades and of diamonds in particular are celebrated for their agility. I will endeavour to make them give a proof of it by jumping from one side of the table to the other. To enable you to see their performance the better, I will place them upright in these two little stands, one in each."

The stands in question are of simple cardboard, put together so as to form miniature easels, closed at back. The performer places one card in each, face outwards. He then continues: "Now I am going to command those two cards to change places, jumping right across the table. I shall not cover or conceal them in any way, but they are rather bashful, and will not jump if they know that people are looking at them, so with your permission I will just turn them round. Please notice, before I do so, that the knave of spades is here, on this side, and the knave of diamonds on this side" He turns each card, after showing it, face inward accordingly. "And now for the jump." Standing behind the table, he crosses his hands above the two cards, and then brings them swiftly apart, saying, "Presto! Go!" When, a moment later, he again turns the cards face outwards, they are found to have changed places.

"It's s a poor rule that won't work both ways," he continues: "Once more I will turn the two cards with their backs to the company. Again I say, Go!" He makes the same movement as before above the cards, and then, turning them face outwards, shows that they have come back to their former positions.

The secret is of the simplest. The two stands are prepared with duplicates of the cards intended to be forced. Each duplicate is placed on the stand face inwards, and covered with a loose piece of cartridge paper cut to the exact size and shape of a card. To the eye of the spectator the paper is merely the back of the cardboard stand, which therefore appears empty. In exhibiting the trick, the performer places the forced knave of diamonds on the stand which contains the nave of spades, and vice versa. To effect the change he has only to turn both cards, with the piece of paper between them together. To reproduce the original cards, after replacing each couple upon the stand, he turns the front card only.

If the performer has a moderate amount of skill in card conjuring, he may greatly heighten the effect of the trick by making the cards pass from hand to hand in the first instance, after the manner de-

scribed in Later Magic (p. 501). It would then (apparently) strike him that, as he held the cards in his own hands, he might be suspected of himself producing the effect. To prove the contrary, he would offer to make the cards repeat their performance without his touching them, and fulfil his undertaking after the manner above described.

THE BALL OF WOOL TRICK

(IMPROVED)

The passing of a borrowed ring or marked coin into a ball of wool is, as the reader is doubtless aware, one of the oldest of conjuring tricks. To those who are not in the secret, it is a capital trick still, being in its way as much of a puzzle as the problem of how the apple got into the dumpling, which so perplexed King George the Third.

Unfortunately, the trick, in its ancient form, is a secret no longer, having been given away by nearly every "Boys' Own Book" that has been published for the last fifty years. Some of our German friends have, however, recently revived it, with improvements. I have ventured to amend what seems to me a weak point in their working, and to introduce a little expedient of my own for the secret abstraction of a borrowed ring or coin. The trick thus modified will, I think, be found well worth exhibition, and will puzzle even those who are familiar with the older working.

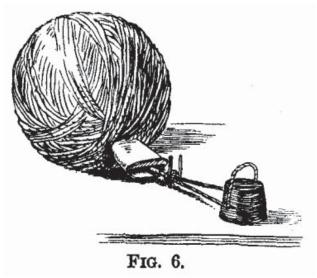
The special device to which I have above referred, and which will be found applicable to many other tricks is the abstraction of the ring from the inner—most of a number of boxes, in which it has been securely deposited by the spectators themselves. This effect is produced by a novel use of a very old friend of the conjurer, the familiar "nest of boxes." The nest most suitable for the present purpose is the set of twelve circular boxes, usually sold at half a guinea, or thereabouts. This must be supplemented by duplicates of the three smallest boxes, the more closely resembling the originals the better. The most essential point, however, is that the largest of the three shall fit precisely within the next larger of the full set.

To prepare for the trick the twelve boxes of the complete set are taken apart, and, with their lids replaced, laid on a tray upon the table. The three duplicate boxes are deposited, closed and one within the other, but otherwise empty, in the performer's left pochette.

The ball of wool is prepared after a special fashion. A flat tin tube is employed, as in the older form of the trick, but before the wool is wound into a ball, one end of it is formed into a loop, 21 inches in length. This loop is drawn through the tube till its whole length projects at one end; the remainder of the wool being then wound on to the opposite end in the usual way. The ball thus prepared lies on the operator's table, with the tube pointing to the rear, and the loop resting between a couple of headless pins driven into the table-top in such manner that not quite half an inch of their length shall project above it, and just so close together as to admit the doubled wool of the loop, but not to allow the knot to pass between them. The extremity of the loop is passed over a specially fashioned stud of blackened cork, fixed to the surface of the table. To prepare this, take a cork such as is used for a medicine bottle, five-eighths of an inch in diameter at top. From its larger end take a piece half an inch in depth, and on each side of this, half way up, cut a horizontal groove, just deep enough to receive the wool. At right angles to each of these, towards the smaller end of the cork, cut a similar groove: The cork is then (by means of a tack or French nail driven through it) attached, broader end

downward, to the surface of the table, about an inch and a half to the rear of the two pins before mentioned.

To prepare for the trick, the ball of wool, with the tube to the rear, is placed immediately in front of the two pins, and the loop passed between them, the knot, drawn up close to them, on the side next the ball. Thence the loop, freshly stiffened with soft wax or moustache paste, is pressed into the grooves on either side of the cork, with its bight tilted up, the whole arrangement being as shown in Fig. 6. Beside the ball is placed a glass goblet, of such a size as to accommodate it comfortably. Suspended to an ordinary dress-hook, sewn to the hinder part of the performer's right trouser-leg, is a dummy wedding ring.



These preparations duly made, the performer requests that some lady will oblige him with the loan of a wedding-ring. When, however, the owner is about to hand it to him, he asks her to retain it for a few moments, while he makes arrangements for its safe-keeping. To that end, he brings forward the tray with the set of boxes, and distributes them among the spectators, beginning with the smallest box, which he hands to some person seated at some little distance from the owner of the ring. The boxes are delivered in regular order, from the smallest upwards, but it accidentally (?) happens that between the third and fourth recipients there is some little interval, just too great, in fact, for an article to be handed direct from the one to the other. If circumstances permit, it is desirable that the last-named person should be one seated a little behind the other.

While inviting the company to make sure that the boxes handed to them have no opening save the legitimate and obvious one, the performer gets the duplicate wedding-ring on to the tip of his right fore-finger, which he folds into the hand. Then advancing to the intending lender of the genuine ring, he says "Now, madam, so that you may not lose sight of your ring, even for a moment, will you kindly place it on the tip of my finger?" The finger held up is, it is hardly necessary to remark, the second finger. He then crosses over to the person who holds the smallest box, and asks him to take the ring and place it in the box he holds. In transit, however, he changes the rings, bringing up the forefinger and folding down the second finger, so that it is the dummy ring which is placed in the box. This done, he takes the box and passes it to the holder of the next larger, with a request that he or she will enclose the small box in the larger one. This is repeated with the next box, No. 3. Meanwhile, he has transferred the borrowed ring to the hook, and got the duplicate set of three boxes from

the pochette into his left hand. Receiving the genuine box No. 3 from the last holder, he makes believe to transfer it, for greater convenience, from the right hand to the left, and thence passes in its stead the duplicate set to the holder of No. 4, who in due course encloses it therein.

When this stage has been reached, the performer appears to realise that perhaps the less part he himself takes in handling the boxes, the better. Henceforth, therefore, he contents himself by requesting that each holder, when he has duly enclosed the box handed to him, will hand it on to his neighbour. Meanwhile, he himself steps back to his table and waits the completion of the process; in transit getting rid of the three boxes he holds into his profonde, and taking the borrowed ring from the hook into his right hand. He stands, in appearance, merely waiting at his table, he is not really quite so idle as he seems. While watching with apparent interest the insertion of the boxes one within the other, he passes the borrowed ring over the cork, thereby passing it over the loop. Inserting the top of the forefinger within the bight, he nips the ring between forefinger and thumb, and draws it home to the end of the loop; wherein it thus becomes securely engaged therein. The two nails, holding back the knot, supply the necessary resistance to enable him to do this with one hand.

It is hardly necessary to remark that this process, though it lasts but a moment or so, must be effected under cover of a proper accompaniment of patter. This may take the form of an imaginary account of the purchase of the wool, with an appeal to the ladies present as to whether three halfpence a yard (or some other preposterous amount) was a proper price to pay for it, and a protest against the advantage taken by pretty saleswomen of a "mere man" when he ventures to speculate in goods appropriate to the fairer sex.

When the eleventh box has been deposited within the twelfth, the performer says to the holder of the latter: "Now, sir, unless some one has taken out the lady's ring while the boxes have been passing from hand to hand, which seems hardly likely, it is now safe in your custody, and except by using violence, which I should not like to do (especially as you are a bigger man than myself), I can't possibly get it away from you. But I like doing impossibilities, and I shall take it away from you notwithstanding. And to make the feat more surprising, I shall tie it to the inner end of this ball of wool, which has been here before your eyes all the evening."

So saying, he picks up the ball of wool with the right hand, in so doing dropping the ring into it, and with the other hand draws the ball off the tube, gives it a squeeze, and drops it into the glass.

The trick is now practically done. The boxes being opened one by one, the innermost is found to be empty, and on unwinding the ball of wool, the ring is found apparently tied to its inner end, a decided addition to the effect of the trick. The idea of this addition must be credited to the German wizards; but in their version, as described in *Die Zauberwelt*, the performer carries off the ring and inserts it into the ball behind the scenes. The method I have suggested is, I venture to think, more artistic. It is no doubt somewhat difficult, but still well within the compass of any moderately skilful performer.

A choice between two balls of wool may be offered, the selection of the right one being forced by means of the familiar "right" or "left" equivoque. The duplicate ball is, of course, quite unprepared, and may be tossed to a spectator for examination, with an invitation to "catch."

With regard to the tube itself, it will be found a great advantage to have the edges of what may be called its "mouth" end opened outwards, after the manner shown in Fig. 7. This not only facilitates



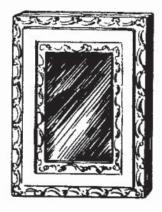
Fig. 7.

the introduction of the ring, but also the withdrawal of the tube from the ball of wool, as the performer in this case has only to clip the tube between two fingers in order to get the necessary grip upon it.

THE NEW CARD FRAME

The reader is doubtless familiar with the "sand" frame, wherein a card or photograph is temporarily concealed from sight by a layer of sand between the glass and the card, the turning of the frame the other way up causing the sand to trickle away into a secret cavity, and disclosing whatever may have been behind it. The frame I am about to describe is like the sand frame in general appearance, and serves, broadly speaking, the same purpose, but differs from it considerably in point of construction.

The frame (shown back and front in Fig. 8) measures five inches by four, the glass, or its visible portion, being about an inch smaller in each direction. It is backed by a thin slab of wood, kept in position by a cross-bar working on a pivot at one of its sides, and fitting into a little wire staple on the opposite side. This slab, like the hinder part of the frame, is stained a dull black. The apparatus is



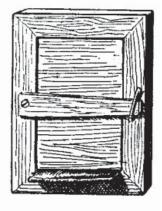


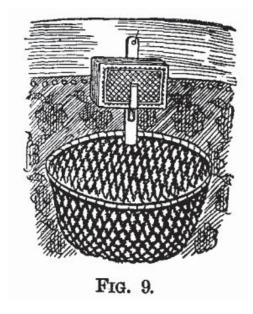
FIG. 8.

completed by a little piece of black silk, of the same width as the movable back, but about an inch longer. Three of its edges are left as cut, but the fourth, at one end, is pasted round a bit of stout string or wire, so that the piece of silk forms a sort of miniature blind, with lath at bottom.

To prepare for the trick (the magical production of a card under the glass), the frame is laid face downwards and the back removed. The piece of silk is laid upon the glass, the card, face downwards, upon the silk, and the back over all, a small portion of the wired end of the silk hanging out between the lower end of the back and the frame. It should be mentioned that the back is purposely made a trifle short, leaving a little gap at bottom, so that by taking hold of the stiffened end the silk can be drawn out at pleasure.

There are various ways of using the frame, but I shall content myself by describing what I venture to think one of the neatest. For this particular working, duplicate frames are required. One of these is prepared as above, but with a double-faced card, which we will suppose to be the knave of clubs,

backed by the seven diamonds. The frame, thus loaded, is placed in the clip of a card servante attached to the back of a chair. Close beside it, carelessly thrown over the back, is a handkerchief.



The other frame has no preparation, being in fact merely a dummy, designed to be handed for inspection. The spectators are invited to take it to pieces, and to satisfy themselves that it consists solely of the three items, frame, glass, and back. While it is being examined, the performer invites a couple of spectators each to draw a card, forcing upon them the seven of diamonds and the knave of clubs respectively.

The frame having been duly examined and put together again, the performer takes it in his right hand (the pack being held in the left), and with the same hand picks up the handkerchief from the back of the chair. Under cover of this movement he drops the frame just examined into the bag of the servante, and takes in its place the prepared one. There is nothing to call attention to the change, for the black silk is undistinguishable from the wooden background. Advancing to the table, he puts down the pack of cards, stands the frame on the table in an upright position, and throws the handkerchief over it. He then, with the left hand, grips the frame at top, through the handkerchief, and lifts both together. The thumb and forefinger of the right hand meanwhile close on the stiffened end of the silk, which is thereby drawn out, and if the conditions of the "show" permit, is left upon the table; if otherwise, is dropped upon the servante behind it. The frame, still covered, is handed to a spectator to hold. The seven of diamonds (assuming that that side of the double card was placed next the glass) is taken from the holder, and "vanished" after any fashion the performer pleases. The handkerchief being removed, the card is found to have passed into the frame.

But the second card has still to be accounted for. Standing behind or beside his table, the performer, as if merely to show "all fair," takes out and lays down the back of the frame, and shows the card as the seven of diamonds. This is held in the right hand, and the frame and glass in the other. Laying these on the table, face downwards, he transfers the card to the left hand, in such manner that it shall reach the hand in a horizontal position, and with the side previously shown uppermost. This may be neatly effected as follows: Hold the card upright in the right hand between the tips of the first and second fingers, the seven of diamonds side turned to the company. When about to transfer it to the

left hand, the tip of the thumb in front of it, and with this, during the transit, tilt it up so that it shall make a half-turn on its shorter axis. If a slight turn of the right wrist be at the same time made, the card will reach the left hand in the desired position.

Held as above, the spectators cannot distinguish the nature of the card, nor indeed which side is uppermost. In this position it is dropped into the frame, the knave of clubs side being thus brought next the glass. The back is replaced and secured in position. Again the frame is covered with the handkerchief, and the second of the drawn cards vanished, to reappear in the frame in place of the one previously seen.

It is hardly necessary to remark that the second card should not be got rid of in the same manner as the first. If in the one case the card has been vanished by sleight of hand, in the other some mechanical apparatus (say, the card-table or card-box) should be employed.

The trick may of course be simplified by producing one card only, but in this case it is too quickly over to produce any great effect.

OUTWITTING THE CONJURER

This is a little magical comedy. It is scarcely adapted for stage performance, but may be relied on to create some fun at a drawing-room "show," or in a family circle.

Two cards are selected from the pack by different spectators, perfect freedom of choice being allowed. The drawers are invited to hold them up, that all may see what they are. "Now, ladies and gentlemen," says the performer, "you have seen that those two cards were freely chosen, and you can all see what they are, so there can be 'no deception.' I propose to make them do a very remarkable thing. I shall put them in two separate envelopes, which you may seal if you please and I shall then make the two cards change places. For the moment, however, I will ask you to put them here on the top of the pack, while somebody chooses the envelopes. Pray observe that I don't move or tamper with them in the slightest degree.

He accordingly replaces the two cards on the pack, showing each as he does so. We will suppose that the one first replaced is the eight of spades, and the second, which is consequently laid on the top, the queen of diamonds. The performer lays the pack on the table, and picking up a packet of envelopes, steps forward to the audience, and has two of them chosen. While, however, his back is turned for this purpose, one of the spectators, taking the company into his confidence by a meaning wink, steps slyly up to the table, and transfers the top card to the middle of the pack. The other spectators, according to temperament, are amused or scandalised at the idea of thus "taking a rise" out of the conjurer; but as a rule, no one ventures to denounce the offender.

Two envelopes having been selected, the performer returns to his table, and taking the top card without looking at it, remarks: "I will place this top card, which you will remember is the queen of diamonds, in this first envelope." He fastens down the flap, and hands the card thus covered to some one for safekeeping. Having done the same with the other card (professedly the eight of spades), he says: "To prevent any possibility of mistake, we will have the name of the card in each envelope marked outside." He hands to each of the holders a pencil. "Write down, sir, please, on your envelope, the queen of diamonds. And you, madam, on yours, the eight of spades. That is correct, I think? You are both quite certain that the envelope contains the card whose name you have written upon it?" Naturally, the persons appealed to are not certain (their real belief being to the contrary), and they say so.

The performer pretends some little annoyance at their incredulity, and at this stage some sympathising person, indignant that he should be made a fool of, usually gives him a more or less broad hint as to the true state of the case. If not, he, after a little more discussion, begins to suspect, from the expression of the various countenances, that some sort of trick has been played upon him, and appeals to some trustworthy member of the company to tell him what is wrong. There is no withstanding such a direct appeal, and the truth comes out.

"Oho!" says the performer, "we have two conjurers it seems. I ought to have looked at the cards before I put them into the envelopes, but I never thought any one would play me such a trick. Of course this has altered matters considerably. Let me see, how do we stand? The queen of diamonds is somewhere in the middle of the pack. This envelope, marked 'queen of diamonds,' really contains the eight of spades; and this other one, marked 'eight of spades,' contains some unknown card. That is the state of the case, I think? Under these circumstances I can't show you the precise trick I intended, but, so as not to disappoint you, I will do something else even more surprising. I will make the right cards find their way into the right envelopes. Queen of Diamonds, will your majesty kindly favour me by passing into this envelope which has your name upon it?"

He takes the cards and "ruffles" them in the direction of the appropriate envelope. "The queen has gone, for I felt an electric spark run up my arm. With the other card we need not be quite so ceremonious. Eight of spades, leave this envelope and pass into the other." He appears to weigh the envelope in his hand, "Yes, has gone. The queen herself would see to that. Her Majesty would never consent to remain shut up with a common 'pip' card." The envelopes are opened and each is found to contain the proper card.

The explanation lies in the fact that the person who shifts the card does so in pursuance of a private understanding with the performer, and that the latter, when replacing the second card upon the pack, deposits upon it an indifferent card, palmed a moment or two previously. It is, therefore, this last-mentioned card which is really placed in the middle, the other two remaining undisturbed, and in due course being placed in the proper envelopes, where they are ultimately discovered.

In a general way the employment of a confederate, in any way, is an abomination to a self-respecting conjurer, but the little drama above described is more in the nature of a practical joke than a conjuring trick proper. In such a case the offence may fairly be excused.

THE GREAT BOOK MYSTERY

This again, is a capital drawing-room trick. It is of the mathematical order, but the principle on which it is worked is very well disguised, and, skillfully presented, it may be relied on to produce an extraordinary effect.

A spectator is invited to take up a book, any book he pleases, and to choose a word on any page of it, with the limitation that such word must be in one of the first nine lines of the page, and within nine words of left hand margin. The performer may here introduce a little patter as to "nine" being an especially magical number, the fact, known to most people, that it has sundry curious arithmetical qualities tending to support his assertion.

The selection having been made, the chooser is requested first to concentrate his mind steadily on the number of the page, and then to multiply it by ten. To the product he is instructed to add twenty-five and the number of the line. The resulting figures are to be multiplied by ten, and the number at which the word stands in the line to be added to the product. The ultimate result is to be then made known to the performer who, with due appearance of mental effort, opens the book and turns up the chosen word.

The secret is as follows: The performer mentally deducts 250 from the final result. Of the remainder, the last digit will be the number at which the word stands in the line, and the last but one the number of the line, while the remaining figures answer to the number of the page. Thus, suppose that the word stood seventh in the sixth line of the forty-third page, the process will then work out as under:

43 x 10=430 430+25+6=461 461x10+7=4617

And 4617 - 250 = 4367, which, separated into its component parts, gives, as will be seen, the numbers 43, 6, 7,

If the performer is asked or volunteers to repeat the trick, it will be well to alter the mode of procedure. The reader is probably acquainted with the fact that if any sum (under ú12) of pounds, shillings, and pence, is reversed, and the smaller of the two amounts subtracted from the larger, the remainder being then reversed and added to the amount previously obtained, the ultimate result will invariably be ú12, 18s. Ild. Such, at any rate, is the case. An example may render the process clearer. Suppose the original sum to be ú6, 5s. 11d. This, reversed, will be ú11, 5s. 6d., and ú11, 5s. 6d. less ú6, 5s. 11d.= ú4, 19s. 7d. This amount reversed will be ú7, 19s. 4d., and adding the two last amounts together, the total will be, as above stated, ú12,18s. 11d. Whatever the original figures, the final result will be the same.

This fact is occasionally made the basis of a conjuring trick, the piece of paper on which the sum has been worked out being placed in a sealed envelope, and the result magically "read" by the performer. I am indebted to Mr J. Holt Schooling, the eminent statistician, for another and very ingenious mode of using it, which may be made to form an excellent sequel to the trick first above described.

A spectator is invited mentally to select an amount 'in the prescribed limit of ú12, and to work out the process above indicated. To enable him to do so the more conveniently, he is handed a pencil and paper, and a book to use by way of desk. When he has worked out the sum, the performer, calling special attention to the fact that he has asked no question, and is therefore in absolute ignorance as to the figures involved, suggests that the pounds of the result shall be considered to denote the number of a corresponding page in the book; the shillings the number of a line on that page, and the pence the position of a word in that line. He will then endeavour to discover the word by thought reading.

As a preliminary step the person who has worked out the sum is requested to look out the word so indicated, and to concentrate his mind steadily upon it. The two persons concerned then join their right hands, and with the other hands hold the closed book between them. After the usual mental struggle for the sake of dramatic effect, the conjurer names the word, which, as the reader is aware, will necessarily be the eleventh word in the eighteenth line of the twelfth page. The operator possessing the same knowledge, has, of course, privately ascertained the word beforehand.

The operator may, if he pleases, in a careless way (say with the remark "you had better take one of these books to write on," or some words to that effect) offer the choice of three or four books, having duly memorised the appropriate word in each of them. The trick must not, however, be repeated, as the fact that the same numerical result again appeared would give away the secret.

An alternative plan is to let the spectators use any book they like, the word being consequently unknown to the performer. In this case he (by the same process) "thought-reads" in succession the page, line, and word, after which he himself opens the book and finds the word. This, however, is scarcely so effective as the other method.

THE CRYSTAL BALLS

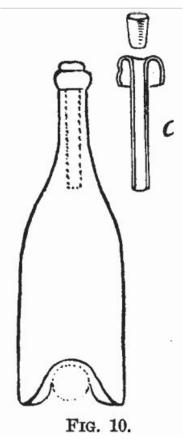
(IMPROVED METHOD)

I gave in Modern Magic (p. 426) two versions of this capital trick, but the working I myself adopted when giving a "show" differed in several particulars from either. I have on several occasions been asked to describe it in print, and I take this opportunity of doing so. Whether I am justified in calling the method "improved," I must leave to the judgment of the reader.

The requirements for the trick are as follows:

- 1. Two clear glass balls; one of ruby glass; and one of polished ebony; each one and a half inches in diameter.
- 2. One clear glass ball, three-quarters of an inch in diameter.
- 3. A shell or half-ball of spun brass, fitting over either of the larger balls; japanned black, and polished. In the centre of the concave side is glued a bit of chamois leather, the size of a two-shilling piece, this addition making the shell absolutely silent in use.
- 4. A pint champagne bottle (see Fig. 10) coated within with black japan to make it opaque, and bearing a printed label taken from a bottle of ink of some well-known maker. The "kick," or cavity at the bottom, is partially filled with a resinous black cement, so as to leave just room enough to accommodate one of the larger balls. To the neck of the bottle is adapted a tin or brass tube, a, of such diameter as to fit comfortably within it. This tube is closed at bottom, and has its upper edge turned over so as to form a sort of cap, modelled to fit the neck externally. This also is japanned black and polished, so that when in position in the neck of the bottle it does not alter its appearance. In preparing for the trick, the bottle is half filled with clear water, after which the tube is inserted as above, filled nearly to the top with ink, and corked in the ordinary way.

On the performer's table, in addition to the bottle, are two lighted candles, a couple of wine-glasses, and a small piece of soft whitey-brown paper. I used in addition a couple of little glass stands, like miniature candlesticks, whereon to rest the balls during the progress of the trick. These are, of course, not essential, but they add materially to the effect, as enabling the balls to be better seen.



The balls were disposed as follows: One of the larger clear glass balls in the right sleeve, and the other under vest, in centre. The small ball was placed in a little silken pocket under the right-hand lapel of coat. The black ball and shell were vested on the right side and the ruby ball was placed in the right pochette.

The performer comes forward at starting with the wand held across his body between the forefinger and thumb of each hand. The palms are turned toward the spectators; incidentally showing that the hands are empty. With the arms in this position, the ball in the sleeve is quite safe. The patter I was accustomed to using was to something like the following effect:-

"My next experiment, ladies and gentlemen, will be an illustration of the art of glass-making. If any of you have ever watched a glass-blower at work, it no doubt struck you what pretty effects he was able to produce by very simple means. But with the aid of magic, it becomes a simpler matter still. I do not even require the ordinary tools. All I need is my wand, a candle to supply heat, and a little of the raw material to work with. This last I shall collect from the air. There are always plenty of glass particles floating about, if you only know how to catch them."

At this point the performer, holding his wand in the left hand, makes little slashes with it in various directions; under cover of this movement lowering the right arm, and allowing the ball in the sleeve to roll out into the right hand, which forthwith palms it. The right hand is then drawn smartly along the wand, and produces the ball as if from the tip. "Here is a lump of glass, you see. It is a little out of shape as yet, but that is easily rectified. All that is necessary is to warm it a little" (he holds it over the candle flame) "so as to soften it a bit, and then give it a roll between the hands. Now, you see, it is quite round." (It was of course, round to begin with, but the audience cannot be certain that it was so.)

"Again I warm it over the candle, and it becomes so soft that I can do pretty much what I like with it; for instance, I just take it in my left hand, so" (really palming it in right). "It at once passes up my sleeve, and comes out here, at the elbow. I can pass it right down through the candle and candle-stick, and out at the bottom, in the same way." (Ball reproduced each time accordingly. Other passes may be introduced at pleasure.)

"By heating it a little more" (ball again held over candle) "I can even make it soft enough to be swallowed." The ball is shown in left hand, apparently taken in right (by the tourniquet), and the right hand carried to mouth, and immediately afterwards shown empty. Performer makes a pretended attempt at swallowing; then, shaking his head, brings the right hand to centre of vest, and produces ball (really the duplicate) from beneath it. "No! I can't manage it. It isn't quite done enough; and underdone glass is very indigestible.

"When you have got one ball, if you want another, that is a very easy matter. All you have to do is to warm the first one a little more" (he holds the one last shown with the right hand over the candle), "twist it into two pieces, and there you are." Under cover of the twisting movement, he brings the two balls simultaneously to the tips of the fingers, one in each hand, as if the one had been made into two; then placing them one on each of the little stands, or side by side on the table, as the case may be. "I can generally get both balls exactly the same size, but I have not been quite so successful as

usual, for I see this one is a trifle larger than the other. However, that is soon set right. All I have to do is to pinch a little piece off it, so."

While professedly comparing the sizes of the two balls (which, as a matter of fact, are exactly alike) the performer stands with his hands grasping the lapels of his coat, one on each side, thereby gaining an opportunity to squeeze out the small ball from the little pocket into his right hand. Taking the supposed larger ball in the left hand, he makes the motion of twisting off a bit from it, and shows the little ball at the tips of the fingers.

"Now, I think, we shall find both balls exactly the same size. No! they are not quite right yet; this one is still a trifle the larger. I must pinch off a little bit more. Or, better still, I will add the little piece I pinched off to the smaller ball. One! Two! Three! Now, you see, they are exactly the same size."

At each of the words, "one, two, three!" a movement of the right hand, holding the little ball at the tips of the fingers, is made towards the larger ball, held in the left. At the word "two" the little ball is rolled by the thumb between the roots of the second and third fingers. At "three," therefore, it has vanished, having professedly passed into the other.

"That is better. Now, you see, the two balls are exactly the same size." The two balls are here shown one in each hand, lying on the fingers, the one in the right hand concealing the little one behind it. The performer then places one on each of the two stands, getting rid of the small ball into a servante or a profonde.

"Now, ladies and gentlemen, having shown you how to make glass, I will show you how to colour it. I shall use the simplest possible form of dye, namely, ordinary ink." He removes the cork from the bottle, and pours the contents of the tube, by way of sample, into one of the wine-glasses. "Will some gentleman (a literary gentleman for choice) examine this, and testify that it is mere common, ordinary ink? You may smell it, taste it, or write a cheque with it; in fact, use any test you like. Or perhaps some lady would kindly lend me her handkerchief to wipe the neck of the bottle. That will be still more conclusive. It's curious: nobody offers. I have tried to borrow a lady's handkerchief for this particular purpose no less than 1197 times, and I have never succeeded yet. Fortunately, it is of no consequence. I will use this piece of paper instead."

He accordingly wipes the neck of the bottle with the paper, immediately holding up the latter, and showing the inky stains. A second time he brings the paper over the neck and wipes it, under cover of doing so twisting out the tube within the paper, and laying both together on the table.

"Now, ladies and gentlemen, which of the two balls shall I colour? It is all the same to me. This one? Very good!" He rests the ball indicated on the neck of the bottle, then picks up the latter with the left hand, taking it up by the neck, and under cover of this movement gets the ebony ball secretly into the right hand. "The ball is rather large to go into such a narrow-necked bottle, but I shall have to get it in somehow." As he says these words, he transfers the bottle to the right hand, grasping it round the bottom, and in so doing introduces the ebony ball beneath it. The glass ball he removes from the neck with the left hand and holds it up, replacing the bottle for the time being (with the black ball under it) on the table.

"The only plan will be to soften the ball again." He holds it over the candle, rolls it between the hands, then takes it between the thumb and forefinger of left hand. "Or perhaps the better way will be to dematerialise it altogether." He makes believe, by the tourniquet, to take it in the right hand, the palm of which he then brings down with a "plop" on the neck of the bottle, meanwhile dropping the ball on to the servante or into a profonde. "That is all right! The ball has passed right in. No, I am not joking, the ball is fairly in, as you can tell by the sound."

Here he picks up the bottle, grasping it low down with the right hand. This he does with a slight tilting movement; which enables him to get the tip of the little finger under the bottle. This prevents the ball falling out of the cavity, though, when the bottle is shaken, it rattles as though it were actually inside.

"So far we have succeeded very well; but now comes a difficulty. How are we to get the ball out of the bottle again? I think I heard somebody say, 'Break the bottle'; but that won't do. I shall want the bottle again. Besides, how about the ink on the carpet? No, we must find some neater method than that. Suppose we try atmospheric pressure. One! two! three!"

At each word he brings the palm of the extended left hand smartly down on the mouth of the bottle, and at the word "three" releases the concealed ball, and lets it fall on the table. "Here is the ball again, you see, but now stained completely black. You may fancy, perhaps (people are so suspicious), that this is some other ball. To prove to you that such is not the case, and that this is really the very same ball, but stained with the ink, I will once more pour out some of the ink. You will find that it is now clear white, the whole of the colour having been absorbed by the ball."

He accordingly pours out some of the water into the second wine-glass, and while bringing this forward, held in the left hand, gets down the black shell into the right. Returning to his table and picking up the black ball, he slips this into the shell, holding it in the right hand.

"This ball has got so very black that I daresay, if we tried, we could make it colour the other ball also. See, I merely rub them one against the other, and they are now both black."

To produce this effect, he shows the black ball covered by the shell, in the right hand, and the glass ball in the left. Under cover of the pretended rubbing them one against the other, he transfers the black ball to the left hand, and the clear glass ball to the right, covering it with the shell. After having shown them as black balls, one in each hand, he transfers apparently the ball held in right hand (but really the shell only) to the left, holding them as in Fig. 11, so that the left hand now apparently holds two black balls. While the general attention is drawn to these, the right hand drops the clear glass ball into the profonde, and palms in its place the ruby ball from the pochette.

"You will remember, by the way, that we started with one ball, and made it into two. Now we may as well make the two into one again." (With a wave of the left hand, he brings the black ball behind the shell, and shows them as one only). "Perhaps some one would like to examine the ball. You would,

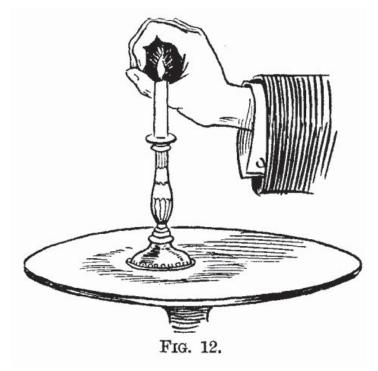


FIG. 11.

madam?" (He drops the black ball, without the shell, into the extended hand, and gets rid of the shell under the vest, or into the profonde.)

"I will now show you a still more curious effect. I will take this ball, which, as you see, is at present jet black and perfectly opaque, and warm it once more over the candle. You will find that warmth fuses the inky colour, and the ball again becomes transparent as at first, but of a beautiful ruby red."

This very pretty effect, which is of my own invention, is produced as follows: The performer makes-believe to transfer the black ball, shown in the left hand, to the right, which, it will be remembered, contains the ruby ball. Without a moment's interval, he shows the ball in the hand; but after the manner depicted in Fig. 12, the ball being held behind the candle flame, and completely enclosed by the hand, save as to the small portion left visible between the thumb and the root of the



forefinger. Under these conditions, as no rays of light pass through the ball, it appears to be black, and is undistinguishable from the ball just previously shown. To change its colour, the hand is moved about over the candle, and ultimately brought in front of the flame, the fingers being meanwhile opened by degrees, so as to allow the rays of light to pass through the ball, under which circumstances it gradually assumes its natural ruby colour.

The trick may be brought to an effective conclusion by offering the ball, thus coloured, for examination. When it is returned, it is offered to a second person, but this time "vanished" by means of the tourniquet, the performer remarking: "Ah! You were not quite quick enough. This experiment makes the ball extremely volatile."

Hartz was accustomed to bring the trick of the Crystal Balls to a finish after a somewhat different manner. On the table, at the outset, were placed a small jug of milk, and a couple of tumblers. In a pochette he had a ball of what is called "opal" glass, which is opaque, and milk-white. When he had

completed the change of the ball from clear glass to red (which he did after the older fashion, wine, in a decanter, being used for the staining process) he proceeded once more to change the colour, as follows:

Having secured and palmed (in the right hand) the opal ball, he took one of the tumblers, and two-thirds filled it from the jug of milk. Then, taking the ruby ball between the fingers of the right hand (the opal ball being just below it), he made the movement of dropping the visible ball into the milk. As a matter of fact, however, it was the opal ball that was dropped in, the ruby ball taking its place behind the fingers. Moving the glass round and round in the opposite hand "to let the milk soak in," and thereby calling the general attention to the tumbler, he dropped the ruby ball into the profonde, and a moment later, pouring the milk into the second tumbler, showed that the ball left in the first had now become milk-white.

I never saw Hartz perform this trick, but I believe that his working was in other particulars on the same lines as that of Robert-Houdin, described in The Secrets of Conjuring and Magic, p. 301, and in Modern Magic, p. 426. I myself occasionally adopted his "milk" effect by way of variation, but with a little addition of my own. I had both a black and a white shell, each vested. After staining one of the clear glass balls black I proceeded to make the other white, by dropping it into the milk as above described. I then asked the company whether they would prefer both white or both black, and made them so accordingly, using either the white or black shell, according to the colour demanded. The final change in either case was the transformation of a black ball into a red, by holding it over the candle as already described.

I have discussed this trick at what may seem undue length, but it is one for which I have always had a special fancy, and which I invariably found to produce a brilliant effect. It is susceptible of almost any amount of variation, and it has the further recommendation that the needful apparatus is extremely portable. Indeed, to my own mind, it is the ideal of a sleight-of-hand trick.

PART II

RECOLLECTIONS OF HARTZ

JOSEPH MICHAEL HARTZ was born on the 10th of August 1836, at Liverpool, where his father, who was of Dutch descent, carried on business as a watchmaker under the name of Hart, the original family name having been anglicised by the dropping of the final "z". It is a curious coincidence that three of the wielders of the wand, Robert-Houdin, J. N. Maskelne, and Hartz, should each have received his early training at a watchmaker's work-bench, to the great advantage, probably, of the mechanical side of their illusions.

When the boy Hartz was about twelve years old, he chanced to witness one of Robert-Houdin's performances and that accident determined the course of his whole life. From that moment, he used to say, he made up his mind to be a conjurer. His father was indulgent to the boy's fancy, and enabled him to visit other performances of Robert-Houdin. He took careful note of the marvels he saw, and strove with all his might to discover how they were accomplished. It was a formidable undertaking, for the master magician guarded his secrets with the utmost care, and much of his apparatus was of an elaborately mechanical kind, depending largely upon electricity, a force of which, at that time, very little was known.

Nothing daunted, the youthful enthusiast worked on. His father encouraged his efforts, and allotted to him a special room by way of workshop. Here, one by one, he reinvented, after his own fashion, the marvel of the great French conjurer; and friends were occasionally admitted to his sanctum to see him exhibit them. He was naturally a timid boy, and by no means one to shine in company; but in the pursuit of his beloved art his shyness was forgotten, and he speedily acquired, within a very limited circle, a high reputation as an amateur magician.

At the age of seventeen he gave his first public show, which took place at the Myddelton Hall, Islington. For the next few years he seems to have filled only. casual engagements. Early in 1858, however, the family migrated from Liverpool to London. It happened that for a time the family lodged in the same house with a young man named Henri Herrmann, who was himself a professional conjurer. The two young wizards naturally fraternised. A Hungarian performer, by name Kratky Baschick, a friend of Herrmann's, happened to be then running a magical and musical entertainment at the Adelaide Gallery, in the Strand. Herrmann and Hartz were on the "free list," and Hartz gained new opportunities for studying the art of deception. A little later Herrmann obtained an engagement at Cremorne Gardens, and Hartz, with his father and brother (for all were more or less bitten by the magic microbe) went almost nightly to witness his performance.

Up to this time Hartz had been little more than a clever amateur, but in the early part of 1859 his father made up his mind to launch him as a professional magician. In doing so, however, it was felt

that some decided novelty, something hitherto unattempted, was desirable, and Hartz determined upon an entirely new departure in the way of apparatus. In spite of Robert-Houdin's simplification of his stage furniture, the conjurers of that day were still largely indebted to the cabinet-maker and the tinsmith; and metal covers and false bottoms figured largely in their performances. Hartz determined that all his paraphernalia should be of glass; and with the assistance of his father and Herrmann, both clever mechanics, he set to work to manufacture appliances of that material. It was a difficult task, but it was successfully accomplished, and in the same year Hartz (who then first reassumed the final "z" of the family name), in his turn made his appearance, with, a performance of "Crystal Magic," at the Adelaide Gallery. The programme included the Crystal Cashbox, Bell, and Glove Column. These, as the reader is no doubt aware, were adaptations from Robert-Houdin's programme. The Crystal Bell and Cashbox were probably no worse and no better than the originals, but in the case of the Glove Column Hartz improved considerably on his model. The performance was well received, and was repeated daily for some weeks. An engagement at the Crystal Palace followed and lasted three months.

A more important step in the young wizard's career was an engagement, in March 1861, to appear at the Hanover Square Rooms. The performance was of two hours' duration, and elicited a chorus of praise from the London Press. The name of the entertainment had by this time been altered to that of "Mons. Hartz's Transparent Illusions," the performer in his "patter" expressing a hope that though the spectators could see through his apparatus, they would not be able to see through his tricks. In the Morning Herald of 8th June 1861, a notice appeared as follows:-

"M. Hartz's performances are unquestionably of a most captivating and accomplished character. By means of his transparent or glass apparatus he performs, with most wonderful volatility and artistic magical skill, a succession of indescribably clever experiments; those of the 'column and glove,' 'electric money,' and 'incomprehensible canary,' accomplished without' apparent apparatus or confederacy, being perhaps unparalleled performances in the way of legerdemain and illusion. While the entertainment throughout is of the most brilliant description, there is no mistake, and no deception, as to its scientific dexterity and talent."

A remarkable specimen of "journalese," but this by the way. The other London papers were equally emphatic in their praise of the entertainment.

A month or two later Hartz paid a visit of some weeks to his native place, Liverpool, where his performances were received with the greatest enthusiasm. At the close of the same year he gave a series of performances at Edinburgh. He had arranged for a fortnight, but his success was so great that it was found necessary to continue for a third week. The gross takings during this visit are said to have amounted to over a thousand pounds, a striking testimony to the attractiveness of the performance.

Hartz's repertoire, which in the earlier years of his career had been almost entirely based on that of Robert-Houdin, gradually assumed a more original character, as he began to give fuller play to his own inventive faculties. The handbill of a week's performances at Leicester, in November 1864 (omitting merely formal matter), runs as follows:-

TEMPERANCE HALL, LEICESTER.

Five nights only, Commencing Monday, November 21st, 1864.

MONS. HARTZ,

From the Hanover Square Rooms and St James' Hall, London,

surnamed

THE CRYSTAL ILLUSIONIST

Whose truly marvellous performances have excited the wonder and admiration of the most scientific men of Great Britain, will - have the honour of giving his

MATCHLESS ENTERTAINMENT OF NECROMANTIC WONDERS!!

Consisting of really unbelievable

FEATS OF NATURAL AND PHYSICAL MAGIC

Compared with which everything before attempted sinks into insignificance; the greatest novelty being the use of only splendid

GLASS APPARATUS,

And accomplishing the most difficult illusions

In the midst of the Audience!

Among other astounding and scarcely credible illusions will be introduced the incomparable and original feat of

MAKING EVERY WATCH IN THE ROOM STRIKE THE HOUR

So as to be heard in the most remote part of the building, the performer being at a distance of many yards.

THE INCOMPREHENSIBLE CANARY AND BIRD-CAGE. THE CRYSTAL PILLAR AND GLOVE,

And at each representation a

COMPLETE EXPOSURE OF THE SPIRIT MEDIUMS,

The mystic writing on the paper pellets fully illustrated by,

THE AERIAL BELL,

In the very centre of the visitors, acknowledged by all who have witnessed it to be unequalled in the annals of Legerdemain. M. HARTZ begs to announce that, in addition to his own performance, he has at a great expense engaged the American artiste,

MR HARRY VIVIAN,

The celebrated Stump Orator, Delineator of Negro character and Buffo Singer,

Who will appear and give selections from his unrivalled Enter-tainment, introducing one of his side-splitting

STUMP ORATIONS

As given by him in New York for 400 consecutive nights.

It will be seen that Hartz, in his account of himself, does not err on the side of excessive modesty, but there was much more foundation for his self-sung praises than there is in the case of many equally laudatory announcements.

Mr Harry Vivian, above named, is the same gentleman who is elsewhere referred to under his proper name of H. B. Lodge. Before settling down to commercial life, Mr Lodge toured with Hartz for some months, and laid the foundation of a lifelong friendship with him. It is painful to have to confess that Mr Harry Vivian's brilliant performances in New York were mythical.

In the year 1867, Hartz, accompanied by his younger brother, Augustus, who had for some time assisted him in various capacities, migrated to America. They jointly established, in The Broadway, New York, a depot for the sale of conjuring apparatus, and speedily obtained a high reputation for the excellence of their manufactures. In his apparatus as in his manipulations, Hartz never would tolerate poor work. He charged high prices, but they were obtained without difficulty; each purchaser knowing that the goods supplied to him, whatever they might be, were sure to be the best of their particular kind.

Meanwhile Hartz continued to perform, and with his usual success. The greater part of his effects were still for many years electrical, involving the use of complicated and cumbrous apparatus, but during convalescence after a long illness, contracted by travelling in Jamaica in the rainy season, he turned his attention to the simplification of his methods, and the ultimate result was the substitution of two moderate-sized cases of apparatus for the two tons of stage luggage which had previously accompanied him on his journeys. One of the most material improvements was the invention of the

mechanical hook to be described in the course of these pages, which produced, in a simpler and more certain manner, the more important magical effects previously obtained by the aid of electricity.

The date of the new departure, above mentioned, may be put at about 1877. About the same time Hartz, as part of his general scheme for producing a maximum of effect with a minimum of apparatus, conceived the idea of developing the well-worn trick of the Inexhaustible Hat into a modern miracle, as, in its later form, his Devil of a Hat really became. His aim was to develop the trick in two directions; first, to enormously increase the quantity of the articles, produced; and secondly, to produce them under more difficult conditions, namely, on a stage so bare that it afforded apparently no cover for even the smallest object.

A minute explanation of this unique trick will be given in the course of these pages.

A popular entertainer nowadays is usually more or less of a globe-trotter, and Hartz was no exception to the rule. Of his many journeyings in America I have no record, but after his return to England, in 1883, he toured largely, visiting not only the leading English towns and the Channel Islands, but the chief cities of France, Spain, Holland, Belgium, Germany, Denmark, Norway and Sweden. He also visited Tunis and Algiers.

His latest foreign tour, commencing in November 1901, and lasting till August of the following year, comprised visits to Amsterdam, Paris, Marseilles, Bordeaux, Lyons, St Etienne, Dijon, Geneva, Lausanne, Lucerne, Zurich, Berne and Munich. The latter part of 1902 was spent in London, where he filled engagements at the Paragon, the Croydon Palace, and the Cambridge Theatre of Varieties. In December of that year he started for what proved to be his last English tour, commencing at Bristol, and visiting Hanley, Belfast (the scene of some of his earliest triumphs), Barrow-in-Furness, Liverpool and Coatbridge, returning to London in February 1903. On the 28th of that month he gave a trial performance at the Palace Theatre. This would in due course have been followed by a regular engagement, but he was not destined to perform again. On the 12th of March he was taken ill, and grew rapidly worse, his malady proving to be Bright's disease. He died on the 29th of June following, at Peckham, and was interred at Tooting Cemetery on the 4th July.

The many honours Hartz received from royal and other distinguished personages bear testimony to the effect produced by his performances. From President Diaz, in 1877, he received the Mexican Order of Merit; from the King of Spain, for a performance at Madrid in March 1885, a diamond crown pin, taken by His Majesty from his own cravat, and with his hands placed in Hartz's coat, and from the Bey of Tunis in April 1885, a diamond star. On 30th August 1886, at Bernstorff Castle, Copenhagen, he performed before the King of Denmark and the King of Greece, and received from each of them a gold medal in commemoration of the event. In the following month a third gold medal was presented to him by the Danish students at Copenhagen, amongst whom his performances always created an extraordinary amount of enthusiasm. In 1887 he received two more medals from royal hands, one in April from the King of Saxony, and one in May from the King of Holland.

At Brussels, in 1884, he was engaged to give a private performance before the friends of the late Count Merode. The Count thought the amount demanded (500 francs) exorbitant, and was not too favourably disposed towards the magician. On seeing the performance, however, he was so de-

lighted with it that he voluntarily added to the fee a diamond pin of far greater value. This, in view of its history, was one of Hartz's most cherished possessions.

My own acquaintance with Hartz dated from 1883, in which year he returned to England from America, and thenceforth made this country his headquarters. For my introduction to him I was indebted to Mr. H. B. Lodge, of Huddersfield (the "Harry Vivian" of the Leicester programme); himself a clever amateur conjurer and musical entertainer, but best known in connection with his sensational exposure, in October 1876, of the sham medium, the "Reverend" Dr Monck.

Hartz was a man who did not easily make friends, but devotion to magic formed a bond of union between him and myself, and almost from our first acquaintance he discussed his many inventions with the utmost freedom; an evening's chat with him being usually followed, the next day, by some hours spent in making notes of his revelations. He gave me, from the first, full leave to make personal use of any of his secrets, only stipulating that I should not disclose them to any one else without his permission. At a later date (July 1901) he generously removed this restriction, save as to the Devil of a Hat, and some half-dozen other tricks which he thought it possible that he might himself again perform publicly.

I have elsewhere called Hartz "a conjurer for conjurers," and I know no phrase which more precisely indicates, so far at any rate as his later days are concerned, at once his strength and his weakness. He was a great conjurer, but a poor showman. He had neither the presence, the voice, nor (be it said in a whisper) the genial impudence which are half the stock-in-trade of the successful entertainer. Like the proverbial Scotchman, he "joked with difficulty." His "patter" had a laboured air, and he lacked that easy bonhomie which at once puts David Devant or Howard Thurston on good terms with his audience.

On the other hand, the working of his tricks, from a technical point of view, was as perfect as it was possible to make it. He was primarily an "apparatus" conjurer, and in general mastery of sleight-of-hand he was surpassed by many performers of far less note, but his manipulation of a given trick left nothing to be desired. He possessed that most valuable of artistic qualities, "an infinite capacity for taking pains." And as a consequence, his nerve was unfailing. He was never haunted by the dread of a slip, because he never made one. But, popular though he was, his work was in one sense too good for the public. An expert would appreciate the severe conditions which he imposed-upon himself; the ingenuity of his contrivances and the neatness of his manipulation. But an ordinary audience is not composed of experts, and a conjurer who habitually goes out of his way to make his tricks more difficult is like the over-conscientious actor who blacked himself all over when he played Othello. He may find his reward in an inner sense of artistic completness, but the public look only at the broad effect produced, and neither recognise nor care for the fact that the performer has produced it (as was the case with Hartz) in the teeth of a number of self-created difficulties.

His great Hat Trick, to be presently described, is a forcible illustration of this.

A DEVIL OF A HAT

Among the many wonders of the magic art, not the least surprising is the fact that a single trick, in the hands of the same performer, should have held the stage as a permanent attraction for nearly forty years. Such, however, was the case with Hartz's great hat trick, known abroad as *Le Chapeau du Diable*, and in England as A Devil of a Hat. The marvel is the greater, because at the very outset the trick was not a new one, but was merely a highly improved version of one which, in a simpler form, had already been worked by magicians for half a century or more.

Who was the first person to use a hat for producing something from nothing it is at this date impossible to say, but it is known that one was so used by Comte, court conjurer to Louis XVIII. From that time (about 1814) to the present the average wizard seems to have found it almost as difficult to keep a hat trick out of his programme as Mr. Dick did to keep King Charles's head out of his Memorial. Nor is it surprising that such should be the case. The recommendations of the hat, as a magical fancy repository, are many. It is an article of everyday use, inspiring no suspicion, and to be found in every company. Further, its shape is convenient; its brim affording just the cover needed for the introduction of any moderately-sized article. With a "servante" behind his table, the merest tyro can "load" a hat; a crook of the finger, and the thing is done. And the load may be almost anything you like. I myself (more years ago than, I care to remember) scored a brilliant success by producing, at an impromptu show in a country village, a turnip, of prize dimensions, from a hat which happened to be the property of a well-known and popular farmer. The familiar cannon-ball might have fallen flat (Hibernically speaking), but this bit of local colour brought down the house.

In the cases above referred to, however, the trick was but one item of a programme; an affair of, at most, two or three minutes, and all over! It wash reserved for Hartz to elevate hat production from a casual effect into a complete act, and to perform it under conditions and on a scale which rendered it a modern miracle.

As a proof that I do not over-estimate the merit of the trick, I may quote the following letter, written to Hartz by Carl Herrmann, first and greatest of the name:

PARIS, August 2nd, 1884.

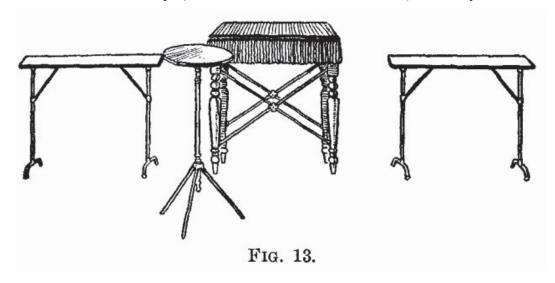
"To M. Hartz, Le Sorcier Americain.

"Permit me to express to you my profound admiration for your performance of Le Chapeau du Diable, which I have witnessed several times, executed in a manner that I think is quite inimitable. I am astonished, for the first time in my life. Yours truly,-

"HERRMANN."

Many expressions to a similar effect by judges scarcely less competent could be cited. It is to be observed, by the way, that when the above letter was written the trick was far less perfect than it afterwards became; the ultra-marvellous finale (the production, without any intermediate "load," of the two bowls and the bird-cage) being an addition of much later date.

The appearance of the stage at the rise of the curtain was as indicated in Fig. 13. There was a small centre table, placed well forward, though I may here remark that the performer carefully avoided passing behind it at any stage of the trick. The only other furniture consisted of a little round table, used from to time to rest the hat upon, and a couple of side tables, if they can be dignified by the name, being three feet long, but only six inches wide. The centre table had a shallow fringe round it, but these had none, and their tops (which were of white enameled iron) were only half an inch thick.



On the centre table lay a folded piece of green baize and a pile of some half-dozen card-board mats. On the little round table, which had a plain wooden top without fringe, was a square woollen cover, and beside this a block of blackened wood, about four and a half inches in length by two in breadth and one in thickness; curved inwards and padded along one of its longer edges. Its opposite edge was so shaped as to fit into a mortise cut in the table-top. When so fixed the block formed a rest for the hat, its object being to prevent this latter rolling off the table when laid on its side. With these exceptions, all was bare. There was not even a flower-pot to relieve the general nakedness.

Under these difficult conditions the performer, borrowing a hat, and showing it absolutely empty, produced from it in succession, first, a number of silk handkerchiefs; not the flimsy twelve-inch squares, which figure so largely in present-day magic, but honest bandanas or neck-wrappers of respectable size. Next, ten silver-plated pint goblets and a wig. Then seven cigar boxes, of the size to take fifty cigars. Then ten more goblets, a square silver cage containing a canary, and a shower of playing cards, in itself, enough to fill half a dozen hats. Next, a hundred yards or so of sash-ribbon, four inches wide, seven lanterns, with coloured glass sides, each containing a lighted candle; and lastly, a doll representing a life—sized Japanese baby, and a lady's crinolette or "dress improver." This, in the days when actual crinoline was worn, was a complete skeleton petticoat of the kind then used. At a later date an "improver" of more modern fashion was substituted.

The production of the whole occupied twenty-two minutes; the performer during the whole of that time never once leaving the stage. The articles as they were produced were deposited on one or other of the tables, every available inch of space thereon being occupied by them at the close of the trick.

Where did the articles come from, and how did they get into the hat? The ordinary spectator could not make even a guess at the answer. There were no abnormal bulges about the performer's clothing to suggest that even the smallest part of them was concealed about his person; and his movements were confined strictly (so the keenest outsider would have said) to the extraction of the contents of the bewitched headgear. Nine-tenths of the spectators would have been prepared to make affidavit (so far as they could trust the evidence of their own eyes) that he never put anything into it. The expert, familiar with the working of the hat trick in its simpler forms, might once in a way detect the moment of a "load," but even to the expert there were many points about Hartz's version that could only be guessed at. Some practical details, small but important, were outside the range of guess altogether. Hence, no doubt, the fact that notwithstanding the prevailing tendency of performers to imitate a proved success, Hartz was left in exclusive possession of the trick, as he had elaborated it. In this particular

"None but himself could be his parallel."

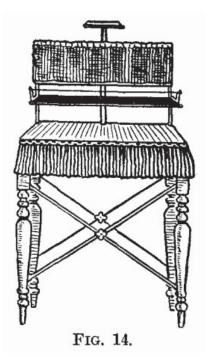
At an early stage of my acquaintance with Hartz, he gave me minute particulars of the hat trick, as he worked it. I took copious notes of his disclosures, and I saw him work the trick on many occasions, the first being at the Trocadero (then a music hall) in April 1883. This was, I fancy, his first public appearance after his return from America. The complete appliances for the trick, on his death in June 1903, came into my possession, and being now freed from any obligation to secrecy, I am in a position to give a complete and reliable exposition of its working. For particulars of his latest improvements, including the bewildering concluding effect, I am indebted to Miss Ada Grist (Hartz's musical accompanist and trusted general assistant during the last sixteen years of his life), who kindly supplied me with much valuable information.

The articles used in the act were as follow:

1. The centre table. The top consisted of a couple of deal boards, two feet six inches long by nine inches wide and not quite an inch thick, hinged on the under side so as to fold together for packing. When opened out for use, each end rested on a cross-piece, eighteen inches long by two wide, through which the legs were screwed into metal plates, one at each corner. The legs were rather long, the total height of the table being just three feet. The cover, which was of "box" shape, so as to drop over the top, was of black calico, trimmed with plain woollen fringe of the same colour, six inches deep. The upper edge of this fringe was level with the table-top, the calico falling down behind it.

At a later period a narrow shelf was added, for the accommodation of the champagne bottles which thenceforth formed part of the "production." This extended across the back of the table at a height of five inches. It was supported at each end by a piece of strap-iron, bent into a suitable shape, and fitting into a metal socket. Later still, at the back of this shelf, a red plush curtain, nine inches deep, was fixed. This served as an effective background for the bottles, and also prevented their acciden-

tally falling off to the rear. Behind this again, in the centre, rose a brass upright supporting a small oblong bracket, which at one period served as a resting-place for a skull, which was made to rise automatically from the hat, and when this item was abandoned in favour of other effects, was occupied by the last produced of the lanterns. (Fig. 14 shows the appearance of the table in this its amended condition.)



Two of the most important "loads" were obtained from the front of the centre table. The doll (with which was tied up the crinolette in a compressed condition) was suspended under the table near the left-hand corner. It hung by a loop, which was passed over the outer end of a small bolt, of the kind known to mechanics as a "necked" bolt. This was kept "shot" until the last moment, and was drawn back by a cord terminating in a ring on the surface of the table, just in time to release the load for use. That portion of the table-cover which hung down in front of the load was slit vertically, so as to offer no impediment to its passage.

Near the opposite corner of the table-top was an oblong wooden box or case, open at the end facing the spectators, for the reception of the "bird-cage," which was one of the later additions to the trick. This latter was seven inches in height, and in plan five inches one way, and four and a half the other. Its sides were rigid, but the bottom could be pushed up to within about an inch and a half of the top, the space left vacant below it affording accommodation to fifteen packs of cards. These were arranged, one upon another, in two columns, with a blackened tin plate at the bottom. All was kept snug by a piece of black braid round the cage, passing over each side, and tied in a bow at the top. The cage, thus loaded, with a living canary bird in the upper portion, lay on its side, bottom outwards, in the wooden case above mentioned (C in Fig. 18), the calico behind the fringe being cut so as to form a flap just large enough to allow it to pass outwards. Cut in the table-top, immediately above the medial line of the cage, was a longitudinal opening, six inches long and finger-wide, terminating at its outer end just short of the front edge of the table. In the table-cover was a slit to correspond.

The only specialities of the little round table were the space cut in the top to receive the hat-rest before mentioned, and a pin-point projecting from the edge which in use was turned towards the spectators. The object of this point will be presently made clear.

The two side tables, which have already been described, were absolutely devoid of mechanism or preparation. At a later period in the history of the trick, a circular bracket, supported by a light wire arch, was added over the centre of each. To the under side of one of them, midway, a hook was added.

The lanterns, seven in number, were circular, with dome tops, and fitted one within another, the outermost measuring six inches in height by five in diameter. The framework was of metal; the sides professedly of glass, but actually of coloured mica. One side of each lantern was open; the openings, when the lanterns were "nested," coinciding, and so giving access to all the interiors simultaneously. They were all, save the innermost, bottomless; the sockets for the candles (which were of the miniature sort used for Christmas trees) being in each case carried on a short wire arm. The outermost lantern had on one side of its opening a tube holding a silent match, and upon the other a piece of the material on which such matches are struck. The wicks of the candles were rendered more inflammable by being moistened with turpentine, so that, by merely passing the match over them, all seven could be lighted simultaneously. Each lantern had a circular opening at top, beside which was a ring, folding down flat at pleasure.

The seven lanterns, duly nested, were deposited, upside down, in a pocket made across one corner of a small square table-cover; in appearance a duplicate of that already mentioned as lying, at the rising of the curtain, on the round table. This was placed till it was needed on a chair just behind one of the wings. The pocket, which corresponded in shape with the inverted lanterns, had an opening at its smaller end, through which the performer could take hold of the rings above mentioned, The lanterns, by the way, were held firmly together by a piece of braid, tied round the bases of the rings.

The handkerchiefs used had no speciality save that they were slightly graduated in size, ranging from twenty-four to thirty inches square. In preparing for the trick, they were laid one upon another, the largest undermost; and then, folded in four and twisted into a convenient shape, placed in the performer's left coat sleeve, just above the cuff, the centres outwards.

The cigar boxes were of pasteboard covered with paper grained in imitation of wood, and were constructed on the same principle as the familiar "reticules," the ends folding inwards, and allowing the box to collapse until the proper moment, when a pull upon a loop of narrow ribbon expanded it to its full dimensions. Seven of these, pressed flat, and held together by a piece of braid, were stowed in the first instance under the left breast of the performer's coat. The ribbons, rolled, and packed into an open-mouthed bag or pocket of green baize, just large enough to contain them, were laid at the outset just behind the large piece of similar baize already mentioned as lying folded upon the centre table. When, at a later stage of the trick, this was picked up in order to be spread upon the floor, the roll of ribbons was deftly transferred to the inside of the wig, and with it placed upon one of the side tables.

The goblets were of burnished nickel, with bottoms complete. Each had a wire rim, to facilitate its separation from the rest when necessary. A couple of loads of these, each ten in number, were

packed in black calico bags and carried by the performer in pockets shaped to receive them, one behind each trouser leg, in the position usually occupied by a pochette. These pockets, made specially strong, were lined with silk, in order to minimise friction. In the innermost of the set of goblets intended to be first produced, was stowed away the wig.

I may here mention that the hat used, though professedly borrowed, was in reality the performer's own property. The only reason for this was that for the purpose of the trick a hat of large size was essential. If Hartz had allowed himself to depend upon borrowing, the hat offered would often have been too small to allow of the introduction of the larger objects. He therefore made things safe in this respect by having a suitable hat handed up by a member of the orchestra, or some friend among the audience with whom it had been "Planted." As there was nothing particular about it, except its size, the arrangement was not open to the usual objection to planted articles.

I may further mention that the trick was of late years worked to a musical accompaniment, without patter. Hartz had perforce adopted this plan in his continental wanderings, from lack of acquaintance with the local languages, and found it to work so well that he continued it, unless by special desire, in England, speaking as little as possible. The trick in this shape went more rapidly, which was a distinct advantage.

Hartz's first proceeding was to take off the cover from the little table, shaking it out carelessly, so as to show that there was nothing in it. He then, as if merely to get rid of it, stepped aside and made a pretended attempt to hang it on a projection of the wing. It fell down on the floor, and was thereupon picked up and drawn out of sight behind the wing by the hand of an (unseen) assistant, who then pushed a chair from behind into view, and laid the cover (really the other with the pocket containing the lanterns) upon it, Meanwhile, Hartz returned to the little table, and casually showing the hat-rest, fixed it openly in the space prepared for it in the table-top.

This done, and the hat having been "borrowed," he showed, in the first place, that it was unmistakably empty. He then proceeded, resting it on the little round table, to turn up the leather lining, and in so doing drew down into it from his sleeve the bundle of handkerchiefs. Professing to find the hat somewhat shallow, he proceeded to look into the cause, which he found to be the presence of the handkerchiefs. These he did not at once completely remove, but drew out portions of them so as to hang over the brim of the hat, right, left, and middle, towards the spectators. Under cover of these and of the hat itself, he, with his right hand, got the cigar boxes from under his coat, and after holding them behind the hat for a moment or two, loaded them in. Then, changing his position so that his left side should be to the rear, he got the nest of goblets from the pocket on that side, let them rest temporarily behind the hat, and presently, under cover of the continued production of the handkerchiefs, loaded in these also. The handkerchiefs, as finally drawn out, were laid across one of the side tables, hanging down more or less from it.

The next item to be produced was the wig, which, it will be remembered, was stowed within the nest of goblets. This was, in the first instance, thrown on the floor, but was afterwards picked up, and placed, for the time being, on the centre table. Next followed the goblets themselves, which at the period I am now speaking of were ranged along one of the side tables. The production of these was single-handed, the hat being held in one hand and the goblets taken out with the other.

Next came the cigar boxes. This very effective item was discarded in Hartz's later performances, in order to enable him to state, with truth, that not a single article of a collapsible nature was used in the trick. The alteration is characteristic of the man. Most conjurers are content if they deceive the public, and regard any means of doing so as legitimate, so long as the illusion is complete. Hartz aimed higher. His ambition was to puzzle the expert as well as the outsider, to do something that no one else could do, and to that end he deliberately went out of his way to make the conditions of his performance as difficult as possible. From the mere "showman" point of view, such a course was a foolish waste of energy. One cannot, however, too highly admire the artistic feeling which prompted it, and which was the secret of the perfect finish of all Hartz's performances.

A movement towards the centre table enabled the performer to load into the hat the second set of goblets, which he placed on this table. In order to make room for them, he took up the piece of green baize which has been mentioned as lying on that table, and moved it aside; in so doing transferring the roll of ribbons from it into the wig, which lay close beside it. Midway in the production of the goblets he appeared to notice that the nap of the hat was ruffled. To set matters right, he picked up the wig and smoothed the hat with it, under cover of this very natural action introducing the roll of ribbons. Finding, apparently, that two or three more goblets still remained in the hat, he made further room for them on the table by removing the green baize altogether, and spreading it, upon the stage, in readiness for the subsequent production of the cards. He then returned to the table and placed on it the remaining goblets. The placing of the last one brought his right hand (the hat being held in the left) just over the pile of mats. He picked these up, and, showing each as he did so, laid them on different parts of the table, answering to the intended positions of the lanterns. The confiding spectator never suspected that in picking up the mats (which, I may remind the reader, were laid just over the bird. cage), the performer's middle finger, dipping down through the slot in the table, had pushed the bird-cage into the hat, held in readiness to receive it. The action was so easy, and the effect so well disguised, that a spectator, even if knowing the manner and the precise moment of the load, could not claim to have actually seen the operation.

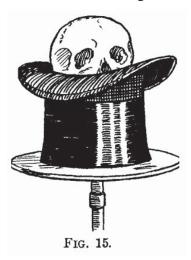
The cage and bird were next produced. The braid being untied, the mere act of lifting the cage out of the hat caused the bottom to sink by its own weight into its proper position, carrying down with it the perch and seed trough; the cards naturally remaining behind in the hat. The cage, in this new condition, might be freely handed for inspection, as on all sides, save the bottom, it was perfectly rigid. The playing cards were next produced. This was done by the performer holding the hat with both hands, and shaking them out by a succession of jerks; causing them to overflow the brim, and to fall upon the outspread baize, where, in a scattered condition, they appeared equivalent to many times the bulk of the hat.

It will be remembered that just previous to the "cage" load, the roll of ribbons had been introduced into the hat. These were now paid out yard by yard on to the little round table, and as they appeared likely to increase indefinitely, it became necessary to provide for their accommodation. For that purpose the performer fetched the table-cover from the chair at the wing and laid it over the table, with the pocket containing the lanterns on the side remote from the spectators, who naturally assumed the cover to be the unprepared one they had previously seen. The little point (above referred to) in the edge of the table, catching the cloth, prevented its being dragged off by the weight of the lanterns. When the ribbons had all been brought out, the performer gathered up the cloth by the four corners, and made a pretended attempt to put the whole back into the hat. He naturally failed to do

so, the ribbons alone, in their unrolled condition, forming a mass about five times as big as the hat, but under cover of the make-believe attempt he took hold of the rings of the lanterns (through the hole in the pocket) and gently lowered them into the hat. The next step was to light them by means of the match provided for that purpose after which they were produced one by one, and deposited on the centre table, on the mats placed, as already mentioned, in readiness to receive them.

The putting down of the last lantern brought the hand of the performer to that corner of the table underneath which were the Japanese doll and crinolette. In depositing the lantern he drew back the bolt, the hat being for a moment simultaneously pushed forward under the overhanging fringe. In drawing it back again, the load was brought away within it. The doll was produced in due course, and the production of the crinolette brought the trick to a termination.

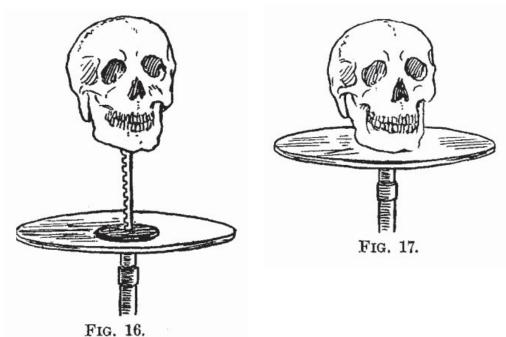
Even in its earlier form, as above described, the trick was sufficiently astonishing. But Hartz was never content with doing well if it was possible to do better, and he was always on the look-out for some further element of mystery. His first improvement was the substitution for the doll of a human skull, which rose automatically from the hat, the performer standing at a distance from it, and taking no part whatever in the operation. This, as also the production of the champagne bottles, to be presently noticed, was the outcome of a suggestion of my own, made in response to Hartz's often-repeated request to give him an idea for some striking effect, no matter how impracticable it might seem. "Only give me an effect," he used to say. "If it is possible to work it out, I'll do it," and he frequently sat up into the small hours of the morning, wrestling with some apparently hopeless suggestion. I should add that in both the above cases the working out of the idea was exclusively his own.



The skull (an excellently modelled imitation in papier mache was suspended, in conjunction with the crinolette, under that portion of the table where the doll had formerly been, and was introduced into the hat in the same way. The performer placed the hat, after the load, on the little round table, and moved away from it to another part of the stage. Presently an uncanny grating sound called attention to the hat. Rising by slow degrees, the skull came into view, as shown in Fig. 15. The performer took it out, and placed it on a raised bracket over the centre table. The production of the crinolette followed, and, as before, concluded the trick.

The automatic rising of the skull was managed in a very ingenious way. Fixed to the inside of the crown at top, and terminating in an oblong metal base, about four inches by six, at bottom, was a

rack and pinion arrangement, having an upward and downward movement to the extent of four inches. The pinion was in connection with a spring-barrel which forced it normally upwards, into the position shown in Fig.16. The skull, however, yielded to gentle downward pressure, and when it had reached its lowest point, as in Fig. 17, could be there arrested by pressing back a lever, the end of which projected a quarter of an inch or so above the cranium, in the region popularly ascribed to the bump of veneration. Under these circumstances, the base was not noticeable, and it was in this



condition that the skull was loaded into the hat. A brass eyelet, close to the end of the lever before mentioned, served to suspend it under, the centre table till needed. The skull once fairly in the hat, a forward push of the lever started the rising movement. Before taking it out of the hat, Hartz pressed the skull down again to its lowest point, preventing its again rising by pushing the lever back to its original position. In placing it upon the bracket designed to receive it, he took care so to handle it that the base should not be seen.

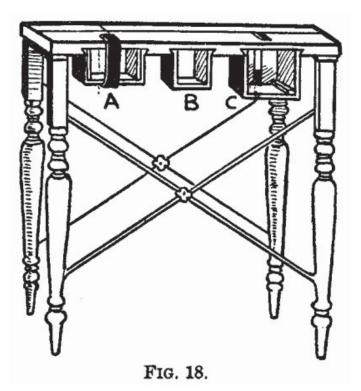
A further improvement was the production (in addition to the metal goblets) of eighteen (professedly) glass goblets, coloured ruby and green alternatively. Twenty metal goblets were still produced, but a set of smaller size was used, the whole twenty now forming a single load. These were carried in the pocket behind the thigh on the left side, a pair of baby's shoes, stuffed into the innermost, giving the performer an opening for a mild joke (at a later period merely in dumb show) at the expense of the supposed owner of the hat. These goblets, when produced, were all placed on the centre table. The transparent goblets, which were of large size, were, in the final form of the trick, made of coloured celluloid, other materials previously tried having proved unsatisfactory. Similar goblets, of smaller size, have now for some time past been procurable at the conjuring depots, but Hartz was unquestionably the first performer to use celluloid for this purpose.

This set of goblets, eighteen in number, was placed in the pocket behind the right thigh, and were loaded into the hat as the second set of metal goblets had formerly been. The wig was now placed in

the innermost of these, with a second half-dozen silk handkerchiefs packed in on the top of it. These were also produced in the course of the trick.

The production of pint champagne bottles (ten in number, and to all appearance full) was a still later addition. The reader, familiar with the wiles of the conjurer, will naturally suspect that they were not of glass, but of some more manageable material, and that they were somehow packed one within the other. But at the very outset he is confronted by a serious difficulty. The expedient of "nesting" is only practicable with articles appropriately shaped, and having no inconvenient excrescences. Now the bulging cork of a champagne bottle would seem to be an insuperable obstacle in the way of its being so treated. Most men would have got over the difficulty by suppressing the corks, and producing admittedly empty bottles. This would have been quite good enough for the public, but it was not good enough for Hartz. Nothing short of bottles with corks complete would satisfy him.

His solution of the problem was as simple as it was ingenious, though it was not arrived at without much cogitation. The bottles were of thin copper, coloured with a brownish-green lacquer, which, by artificial light, gave them the exact appearance of glass. They were duly labelled, and had the usual gold foil round their necks, but they were made corkless, the neck tapering gently right up to the mouth. The supposed cork was in reality a metal cap, moulded to proper shape, duly wired and gilt, and slipped over the neck the moment before production. The bottles were necessarily bottomless. The outer one of the nest was in other respects complete, but the rest were slit down one side from top to bottom, the edges over. lapping slightly, so that they might nest the better. Within the cavity of the innermost were the "corks." The set of bottles was enclosed, necks inwards, in a



tapering bag of black calico, with a piece of inch-wide elastic across its broader end. Thus enveloped, it was inserted, again necks inwards, in a narrow, open-ended box (B in Fig. 18) immediately under the table-top, midway between the two front legs. A ring, to which was attached a thin cord, was slipped over the smaller end of the bag. From this ring the cord passed outwards over the front edge of the table-top, and thence (through a hole made for that purpose) back to its under side; then again through a pulley and a couple of brass eyelets to the right side of the table, hanging down in a loop midway between the two legs. After putting the last of the metal goblets upon the table, Hartz gave this loop a pull, thereby drawing the ring forward and shooting the bottles into the hat.

To separate and "cork" the bottles and produce them from the hat, it was necessary to use both hands. To facilitate this, the hat was laid on its side on the round table, with its crown towards the spectators, the performer standing behind it, and the "rest" already mentioned keeping it in position.

The last and crowning improvement was an alteration in the finale. The crinolette was discarded, the concluding effect being the production in quick succession, and without any intermediate load, of (1) a handsome blue porcelain bowl, spherical in shape; (2) a bowl similar in shape, but of clear glass, with goldfish swimming in it; and (3) an elegant circular bird-cage, containing a living bird, each one of the three objects being of such a size as to completely fill the hat.

This cage, which was of metal throughout, and silver. plated, was of a construction familiar to conjurers, the bottom sliding up to within an inch, or thereabouts, of the top, in the centre of which was a circular door, working on a pivot, for the insertion of the bird. The bottom being pushed up as above mentioned, the side wires (each pair forming a loop like an elongated hair-pin) folded inwards upon it. In this condition (in which it was only an inch and a half deep) the cage was placed in a shallow box, open at the end facing the public, in the position under the table-top formerly occupied by the "doll" load. The act of pushing it in from the front took up the slack of a piece of black webbing, which crossed the mouth of the box in a vertical direction from its under side. From this webbing a cord was carried along a groove over the top of the table beneath the cover, and brought out just beside the left hinder leg. A pull upon this, immediately after the placing of the last lantern, drew the webbing taut again, and so pushed the cage forward into the hat.

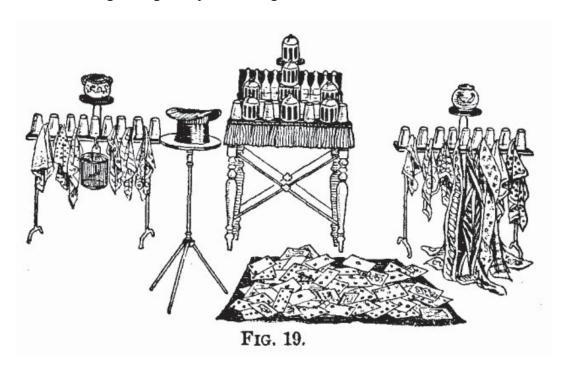
A glance at Fig. 18 will give a clearer idea of the construction of the table, as adapted to this later phase of the trick; A representing the receptacle for the cage last mentioned, with the webbing (as drawn taut) that brings it forward; B the resting-place of the champagne bottles; and C that designed to contain the square cage containing the cards.

The production of the two bowls, as it was certainly the most startling, was also the most ingenious part of the trick. The supposed porcelain bowl was in reality of metal, artistically enamelled in imitation of porcelain. It was bottomless, and so constructed that its lower half would open freely outwards, though it was normally kept closed by the action of very weak springs. The glass bowl, which was just a shade smaller, was inserted into the metal one from below. In this condition they were suspended under the left side of the table, midway between the two legs on that side. The manner of suspension was as follows: In the first place the bowls were held together by a shallow black calico bag covering the lower half of the outer one, and kept taut by a strap of broad elastic, buttoned over the top. The lip of the metal bowl, which curved outwards, was then passed over two little metal supports (in effect flat hooks), which were screwed to the under surface of the table-top. A wooden "stop" prevented the bowl being pushed in too far. After the performer had placed the last lantern, and was moving away from the table, he made believe to notice that one of the lanterns was out of line with the rest. He stepped back to rectify this, and as he did so with the right hand, the left, under cover of his body, passed the hat for an instant under that side of the table, raised it under the two bowls, and drew them away within it.

The act of lifting the blue bowl out of the hat caused its movable sections to spread apart (leaving behind it the glass bowl, dragged through by its own weight), closing again the moment it was clear. The blue bowl having been exhibited and placed on its appropriate bracket, the glass one was next

produced, the unmistakable "no preparation" of this one naturally inducing the belief that the blue bowl was equally free from deception.

The two bowls were placed one on each of the brackets before mentioned as being supported on wire arches over the two side tables. The production of the second cage followed. This was suspended from the hook under one of the side tables, and made a brilliant finish to the trick, the final appearance of the stage being as depicted in Fig. 19.



I have perhaps been over prolix in my explanations, but I have been anxious to make them as complete as possible, partly as a tribute of respect to the memory of a great conjurer, and partly to prevent, so far as in me lies, a trick of such high artistic merit being lost to posterity for lack of adequate record. Those of my readers who have had the good fortune to see the trick performed will testify that I have in no wise exaggerated its effect.

THE INEXHAUSTIBLE HANDKERCHIEF

This, otherwise known as the *Mouchoir du Diable*, was occasionally substituted by Hartz for the Devil of a Hat. They are of the same class, both being "Production" tricks. In point of brilliancy there is little to choose between them.

The Inexhaustible Handkerchief is an amplification of the familiar Fish Bowls trick, worked up, as was customary with Hartz, to the maximum point of effect, and expanded into a complete act. The handkerchief used was a neck-wrapper, or small shawl, of figured cashmere, about four feet square. With this as his sole visible apparatus, the performer produced in rapid succession:-

- (a) A huge feather plume, three feet in length.
- (b) A glass bowl containing water and goldfish; the bowl being about eight inches in diameter, and supported on a metal foot.
- (c) A second plume.
- (d) A second bowl of same size as the first, also on a foot, but in this case wholly of glass.
- (e) A third bowl, all of glass, like the preceding one.
- (f) A fourth bowl, with metal foot. (Each bowl, as produced, was placed upon the centre table, the two plumes being stuck into holes, made for the purpose, in the front corners of the table.)
- (g) An electro-plated bowl, of specially large size, being twelve inches in diameter, and (including foot) nine inches in height.

At this point the performer varied his effects by "vanishing" one of the glass bowls previously produced, and then brought the trick to a conclusion by producing from the handkerchief a good-sized bird-cage with living birds.

Before each production the handkerchief was shown empty. The mode of production of each article I proceed to describe.

(a) The "plume" was in truth a bunch of plumes, three or four such being bound together so as to form one of abnormal size. This was placed at the outset, feather end downwards, in the performer's left trouser -leg. To the stem end was attached a piece of thin string six inches long, with a brass curtain ring at the free end; also a two-inch length of flat black elastic webbing, in the opposite end of which a buttonhole was formed. After the plume had been bestowed within the trouser, the ring was hitched on to a dress hook, sewn just inside the breast-opening of the vest. The elastic was tempo-

rarily slipped over one of the brace buttons (so as to prevent the plume from rising up prematurely) and slipped off the button again before the plume was required for production.

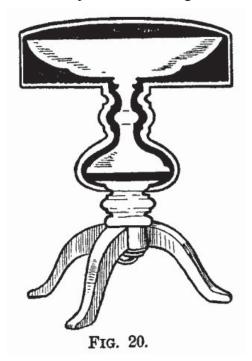
The performer, after showing one side of the handkerchief to prove it empty, crossed his hands in order to show the other side. This brought the right hand close to the left side of the vest-opening. The thumb being slipped within the ring, the drawing of the hands back to their original position partially dragged the plume from its hiding-place, though still masked by the handkerchief. A slight gathering up of the proper corner of the handkerchief enabled the right thumb and forefinger to get hold of the stem of the plume, which was then, by a sidelong movement, drawn completely out of the vest, and in due course produced, after which it was inserted in its intended position at the corner of the table.

- (b) The metal foot of the first bowl was in three parts, each on a hinge, and so shaped as to fold up close against the bottom. When these were drawn away from it, they together formed a tripod; an ingenious arrangement of rubber springs enabling them to accommodate themselves to either position, and holding them securely therein. This bowl, covered with rubber in the usual way, was placed at starting under the left arm of the performer (kept in position by the pressure of the arm) and produced after the manner of the ordinary fish-bowl, the foot being opened out before the hand-kerchief was removed.
- (c) The second plume was arranged and produced after the same manner as the first, save that its hiding-place was in the right trouser-leg, and that it was drawn out with the left hand. The performer, having produced it, threw the handkerchief temporarily over his left shoulder, and moved towards the centre table to place the plume in position, but it at first refused to stand upright, the hole for its reception being purposely made a trifle too large. At a second attempt, however, it was made to stand erect, being in fact stuck on this occasion into a hole of proper dimensions, close beside the first. Under cover of dealing with this pretended difficulty, the performer secretly got under the handkerchief the bowl used for the next production. This bowl, which was uncovered, was concealed in an open-ended box just below the table-top, masked by the fringe which surrounded the table.
- (d) This bowl was of glass, with a foot cast in one piece, and without any preparation. The performer was therefore enabled to bring it forward and offer it for inspection, thereby leading the spectators to believe that the two bowls previously produced were of the same unsophisticated description.
- (e) This bowl corresponded in appearance with the one last described, but differed from it in the fact that it was made in two portions, a dowel at the bottom of the bowl proper fitting into a corresponding cavity in the upper part of the foot. The bowl portion, with rubber cover, was carried in a semicircular pocket on the right side of the vest, the foot being lodged in a second pocket in the same side. The performer having got the bowl under the handkerchief, adapted the foot to it before he uncovered it, and then, grasping it by the stem, deposited it upon the table. So placed, there was nothing about its appearance to suggest that it was other than an ordinary bowl or vase.
- (f) This bowl, which had a metal foot, and answered in appearance to b, was slung behind the performer under his coat, and when released swung round to the front, after the method used by

Robert-Houdin for the production of a similar bowl, as described by him in his Secrets of Conjuring and Magic.

(g) After the production of the fourth bowl, the performer threw the handkerchief over a little round table, and picked it up again, bringing away beneath it a wire ring, twelve inches in diameter, which had previously lain, practically invisible, on the table. The wire, keeping the cloth extended in a circular form, naturally induced the spectators to imagine that there was another bowl beneath the latter. The performer made believe to be about to deposit this imaginary bowl on the table whence he had taken it, but apparently changing his mind, draped the cloth instead over a low stool resembling a music stool, with a deep top and solid-looking pillar. On again raising the cloth the large silver-plated bowl was seen resting on the stool.

The secret of this last effect lay in the stool itself, which was an extremely delusive article. A glance at Fig. 20, giving a view of it as seen from behind, will make clear its construction. The seat and the upper part of the pillar, on the side remote from the spectators, were hollowed out so as to receive the bowl; the pillar being in fact, for that portion of its height, a mere shell.



The bowl, uncovered, was stowed away in the cavity thus formed. Under cover of lowering the imaginary bowl on to the stool, and draping the handkerchief around it, the actual bowl was lifted from its hiding. place and set, under the handkerchief, upon the stool, The wire ring settled down upon the brim of the bowl, where it was kept in position by three small projecting pins on its own lower edge, and so placed, became again invisible. This bowl was then in due course transferred to the centre table.

The bowl which was made to disappear was the glass bowl (e), which, it will be remembered, was in two portions. Lifting it by the stem, the performer placed it upon the stool whence the plated one had just been produced, and spread the cloth over it. Under cover of his manipulations, he got down

from under his vest a cardboard disc, corresponding in size to the top of the bowl, and lowered it gently thereon. Again apparently lifting the bowl under the cloth, he brought it forward towards the spectators. Before moving away from the stool, however, he removed the upper part of the bowl and slipped it into the hollow seat, so that what he actually brought forward was the foot only, held in one hand, and the cloth, distended by the cardboard, held in the other, at an appropriate distance above it. Coming forward he invited some spectator to place his hand under the cloth and ascertain for himself that the bowl was still there. The person addressed did so, and feeling the foot, bore witness that such was the case. In moving back to the centre of the stage the performer dropped the foot into a profonde, and a moment later slipped the cardboard disc beneath the vest, and, shaking out the cloth, showed that the bowl had disappeared.

The production of the bird-cage needs but little explanation. This was square, with rising bottom and folding sides, after the manner of the familiar "bird-cages from the hat," though of very large dimensions. This, in a folded condition, rested in a loading-pocket in the breast of the coat till needed.

I have described the trick as I myself knew it. At a later date Hartz reproduced it with sundry alterations which doubtless made it, if possible, even more effective, but I never had the good fortune to see it in this amended form. I am informed, however, that the appliances used by the inventor, with his "latest improvements," have passed into the possession of M. Servais Le Roy, by whom, it is to be hoped, this grand trick will sooner or later be reproduced, and in whose skilful hands it should lose nothing of its brilliancy.

THE IMPROVED MONEY COLUMN

The expert reader must be prepared to find that a good many of the tricks I have yet to describe are, in general effect, identical with illusions with which he is already familiar, though differing from them in points of detail, or in the methods by which the desired result is produced. The explanation of this is twofold. In many instances Hartz was the pioneer, and the current version is an imitation (though not necessarily inferior) of his original. In other cases he himself borrowed the idea, but improved upon the working till it reached his own high standard of artistic completeness. The trick next following is an example of the latter class.

Readers of More Magic may recall a trick therein described (p. 181) under the title of The Climbing Coin, wherein a borrowed florin is made apparently to climb up the face of a wooden column, and deposit itself in a box placed on the top. Hartz made important mechanical improvements in this trick. To render them intelligible, it will be desirable briefly to recall the construction of the original apparatus.

The pillar, up which the coin climbs, is of polished mahogany, about nine inches in height, and in appearance as depicted in Fig 21. It consists of a rectangular plinth (with a drawer in its upper portion), from which springs a square column, flat on top. The face of the column is recessed in such manner as to allow the upward passage of a florin, the woodwork

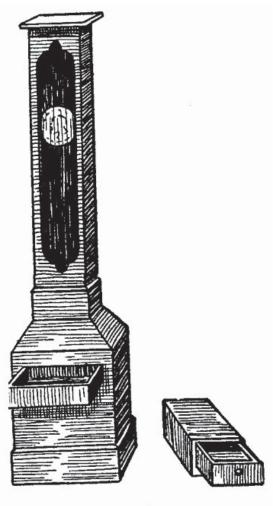


FIG. 21.

overlapping the coin about an eighth of an inch on each side. In conjunction with the column is used a second mahogany drawer, enclosed in a case of the same wood, about three inches in length by two and a half wide and one and a half deep. This is so constructed that when the drawer is placed in position and pushed fully home, a coin, previously concealed in a cavity above, is released by the opening of a hinged flap, and falls into the drawer.

But to return to the pillar, which is the portion of the apparatus to which Hartz's improvements apply. The plinth, it should be stated, is a reproduction, on a somewhat larger scale, of the familiar "Davenport Cabinet," being so constructed that when the appropriate drawer is inserted in its place and pushed home, its bottom, which is hinged to the forward edge, drops like a trapdoor, allowing anything previously placed in the drawer (in this case the borrowed florin), to fall through into the

hand of the person holding the pillar. The act of pulling the drawer out again raises the bottom to its original position. The coin which climbs up the face of the pillar is a dummy, which, till required, lies hidden at the foot of the recess up which it afterwards travels. A silk thread is attached to each side of the coin, covered by the overlapping woodwork, and the opposite ends of these threads are attached to a little leaden weight, which works up and down in a hollow shaft at the hinder side of the column. The shaft is at the outset filled with sand, on top of which the weightrests. When the performer desires that the dummy coin shall ascend, he pushes in a little metal tongue projecting at the back of the pillar. This opens a valve, which allows the sand to trickle down, through the temporarily bottomless drawer, into the base beneath. The consequent sinking of the weight causes the coin to rise, finally passing out of sight behind the overlapping woodwork at top, professedly into the little box.

This form of the apparatus is subject to the draw-back that a heap of sand accumulates in the plinth, and this being bottomless, the column cannot be lifted up without disclosing the sand. To meet this difficulty, it is usual to place the apparatus on a plate or tray, professedly in order to cut off all communication with the table, but in reality, so that all may be carried away together.

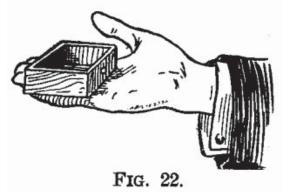
Hartz set to work to remedy this, which is obviously a weak point in the trick. His first step was to divide the apparatus into two parts, the lower being simply a "Davenport Cabinet," capable of being used separately for all purposes for which such a cabinet is available. Its only speciality was that it had a square mortise on the top, into which the lower end of the column could be fitted. This arrangement, of course, necessitated the mechanism for raising the coin being wholly contained in the column itself. The sand was accordingly stored at the outset in the upper half of the column, and when the valve was opened, trickled down into the lower half. This, however, limited the fall of the weight to half the length of the column, rendering it, under ordinary circumstances, insufficient to raise the coin the necessary distance.

Hartz got over this difficulty in an extremely ingenious manner. The two threads were attached at one end to the back of the column, at top. They were then passed through two loops at the top of the weight, and thence over a wire bar crossing the inside of the column, in front, to their points of attachment to the coin. Under these conditions, a fall of one inch on the part of the weight lifted the coin two inches, and so in proportion.

At bottom of the column there was a tin receptacle for the fallen sand. This could be removed at pleasure. In the benefit of the less instructed reader, I may briefly indicate the working of the trick. A florin is borrowed, marked, and deposited in the drawer of the little cabinet. Ostensibly, it remains there, but actually passes into the possession of the performer holding the cabinet. The column is now fixed on the top of the cabinet; and the little drawer-box, previously shown empty, is placed on the top of the column. The valve is opened, by pressure on the metal tongue, and a coin (professedly the coin) is seen to climb up the face of the column, and disappear. The little drawer-box is opened, and a coin (again professedly the coin) is thence produced, and exchanged for the original before it is handed for identification.

The following will be found a neat and easy way of effecting this change. The genuine coin should at the outset be concealed in the right hand, lying upon the second joints of the two middle fingers. When the dummy coin has completed its ascent, take the little drawer-box in the same hand, bring-

ing it over the coin; the outer end of the drawer being directed towards the wrist. Press the drawer home, and shake the box, to show by the sound that the coin has arrived. Then pull out the drawer in such a manner that it shall slide out over the concealed coin, which is then pressed by the fingers against its under side. Lay the outer case aside, and show the duplicate coin in the drawer, the posi-



tion of the hand being as in Fig. 22. Turn over the drawer, and make the movement of tilting the visible coin into the left hand, but in reality secure it against the inside of the drawer by a quick movement of the thumb, and let the concealed coin slide out from beneath into the hand.

THE MULTIPLICATION OF MONEY

Hartz was accustomed to work this trick in immediate sequence to that of the Shower of Money. So far as the main lines of the trick are concerned, there is nothing very novel about his working; but there are one or two little points of detail which may be interesting to the reader.

The coins for this and other money tricks were carried by Hartz in "clips" of special construction, being slips of hard wood about three inches long by half an inch wide and a quarter of an inch thick, to one end of which was riveted a piece of clockspring, as shown in Fig. 23. The free end of the spring impinged upon a little pad of wash-leather, to make it noiseless in working. To the opposite end of the slip of wood was attached a leather brace end, which in use was passed over a button sewn near the lower edge of the vest, on the inside. For the purpose of the "multiplication" trick, one such clip, holding five shillings, was suspended on the right hand side, and another, holding four shillings on the opposite side. The only other "property" used was a small cut-glass plate, with a "star" pattern on its under side; the object of this being to make it somewhat less transparent.

Having borrowed a hat, the performer announced that he should further like to borrow twenty or thirty sovereigns. Nobody volunteering to oblige him, he reduced his demand to as many shillings, but finally decided that it would save time if he collected them for himself. He accordingly "caught" them, three at a time, after the



Fig. 23.

usual fashion of conjurers. At the close of this portion of the trick, he invited any spectator to step on the stage, and he would show him "how it was done." Some one having been induced to come forward, he fulfilled this undertaking by "catching" once more the same three coins he had been using throughout, and dropping them into the hat.

This done, after casually showing both hands empty, he took the glass plate in the left hand, and asked his volunteer assistant to count the coins from the hat on to the plate. When the number left in the hat was reduced to half a dozen or so, he remarked: "Come, I should think you can see at a glance how many remain," himself bending forward and looking down into the hat as if to note the number. Under cover of this movement he got into his right hand the five coins suspended on that side, and having done so, instantly transferred the plate to the same hand, holding it on the extended palm, under which circumstances the coins beneath it were not visible. Then, as if changing his mind, he remarked that perhaps, after all, it would be better to count them to the end in the regular way; and this was accordingly done. After enquiring the number, and asking the assistant whether he was quite sure he had counted right, he poured the coins back into the hat, letting those in the hand fall in with them. He then asked for five of them back again, and "passed" these back into the hat with the rest, after the usual course of the trick.

The coins having been once more counted out on the plate, and the tale found complete, he offered to repeat the trick without using the hat. Once more showing both hands empty, he asked the assis-

tant to count the coins from the plate into his (the performer's) right hand. Just as the last coin was reached, he got the four shillings from the second clip into the left hand. "Now, sir, please put down the plate, and bring your two bands close together." The assistant complies, bringing them, naturally, palm to palm. "No, not like that," says the performer, bringing his own hands together in the same way (and so mixing the two sets of coins), "or how am I to put the coins in your hands? Hold them like this," placing the hands together cup-wise.

The assistant again complying, the coins are poured into his hands. Once more the performer asks for five of them back, and professedly "passes" them with the rest. When the coins are counted, they are found to be one short, which one the performer proceeds to "find" after any manner he pleases.

THE MYSTERIOUS ADDITION

This was worked by Hartz as part of the "business" of his Crystal Bell, which rapped out the figures of the total. This, however, as will readily be perceived, is but one of many possible ways in which the result might be indicated. The speciality of Hartz's working was that the total announced was that of the numbers actually written down by the spectators, and not, as is more usual, that of other figures deftly substituted by the performer.

The trick, as presently to be described, belongs to Hartz's "mechanical" period, when he worked with the aid of an assistant, and when the regulation centre table, with servante, formed part of his stage furniture. On the table at the outset was a "card tripod," as described in Modern Magic, p. 139, save that the cover was not shaped like that of a coffee-pot, as there indicated, but was flat, with a simple knob on top. The false top was left behind the scenes.

The performer began by handing round the tripod and cover for inspection, remarking that as he should have occasion to use them presently, he should like everybody to be quite clear that there was "no deception" about them. When they were returned, he handed out a small piece of paper, requesting that some spectator would write on it a number of three, four, or five figures, at his pleasure. The fact of this option being allowed served to convince those acquainted with the more usual form of the trick that the customary plan (the substitution of prearranged figures) was not employed. A second spectator was then asked to write a similar row underneath the first, and to fold the paper in four. Making a special point of the fact that, from first to last, he himself never touched the paper, the performer received it in a "changing ladle" (Modern Magic, p. 358), and handed it to some gentleman for safe-keeping, with a request that he would hold it high above his head. This was done accordingly, the holder (unaware of the deceptive character of the ladle) never suspecting that what he actually received from it was merely a blank piece of paper, similarly folded.

Having thus apparently placed the figures in independent custody, the performer laid the ladle, as done with, on his table, and in so doing let the genuine paper fall on the servante. Thence, under cover of removing some piece of apparatus used in the last preceding trick, it was presently carried off by the assistant, who, after adding up the figures and making a note of the total, laid the paper against the under side of the false top of the card tripod, and on returning to the stage (to bring on the "bell") privately placed the two together in position over the true top.

A moment or two later, the performer, bethinking himself that the position of the gentleman holding the paper above his head might be rather fatiguing, brought forward the card tripod and invited him to lay the paper on this instead. The cover was placed over it to make all secure, and the whole left in the hands of the same person. In due course, the bell, prompted by the assistant from behind the scenes, rapped out the total of the two rows of figures; after which the gentleman having charge of the piece of paper was invited to uncover it, and after adding up the figures, to say whether the bell had answered correctly. When he took off the cover of the little table, this carried with it the false

top and the substitute paper, exposing in its place the genuine one, which all present (conjurers excepted) naturally believed to have remained the whole time in his possession.

A conjurer, versed in modern methods, would naturally discard the ladle and tripod in favour of some simpler and more up-to-date plan of ascertaining what figures have been written down. An effective expedient for this purpose is to rub the back of the paper used with dry white soap, and when handing the paper to be written on, to offer at the same time a little slab of plate-glass, or a hand mirror, to be used by way of writing-pad. Under these conditions, anything written on the paper with a fairly hard pencil will be reproduced on the surface of the glass; very faintly, but still with sufficient clearness to convey the necessary information to the assistant, when, a few moments later, he carries it off.

Another plan is to have the numbers written on an ordinary memorandum block, previously "faked" as under. The two uppermost sheets are loosened round three of their sides, and a piece of carbon paper, not quite so large as the block itself, is inserted, blackened side down, between the second and third sheets. The edges of the second sheet are then pasted down again. After the figures have been written down, and the first sheet removed, the assistant has only to strip off this sheet, when he will find the numbers clearly duplicated on the one below it.

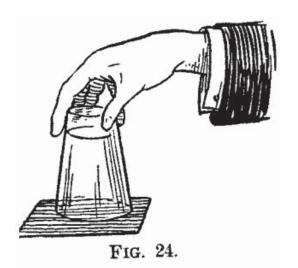
As the Crystal Bell now rarely forms part of a conjurer's paraphernalia, the reader may be glad of a suggestion as to an alternative way of disclosing the total of the numbers. A simple and effective plan would be as under. Let the assistant, after adding up the two rows of numbers, write the total on a playing card, say the seven of spades, and place this in the upper one of a packet of envelopes, which he then brings in, and deposits on the performer's table. Meanwhile, the performer, taking a pack of cards, forces on one of the company a duplicate seven of spades. Leaving this in the hands of the drawer, he picks up the packet of envelopes, breaks the paper band around it, and asks some other person to select any envelope he pleases. The envelope so chosen is handed to the person who drew the card, with a request that he will place it therein and fasten down the flap. The performer, taking it back, returns with it to his table, on which he lays it, or appears to do so. As a matter of fact he "changes" it in transit (by the filage) for the upper envelope of the packet, containing the card with the written total.

The trick is now done. All that remains is for the performer to "summon spirits from the vasty deep," or elsewhere, to write the desired total; or account, in some other striking fashion, for the appearance of the correct figures on the previously blank card. If the performer is gifted with a moderate amount of the dramatic instinct, the trick should produce a brilliant effect.

THE INVERTED GLASS OF WATER

This ingenious trick has long since become common property, and has been exhibited by scores who have no idea to whom the world of Magic is indebted for it.

In a non-magical form, the feat is a very old one. It is a favourite experiment of lecturers on pneumatics, to fill or nearly fill a glass with water, lay a card over its mouth, and invert the whole as in Fig. 24, the card being kept in position by atmospheric pressure. The feat in this shape was interesting, but there was no mystery about it. It was reserved for Hartz to turn this well-worn experiment into a feat of magic. In place of the card he used a piece of mica cut to the exact shape of the top of the glass. When this was in position, and the glass inverted, the mica, being transparent, was practically invisible, and the effect, to the uninitiated spectator, was that the glass was still uncovered, the water being sustained therein by some supernatural means.



inverted the glass, and removed the hand.



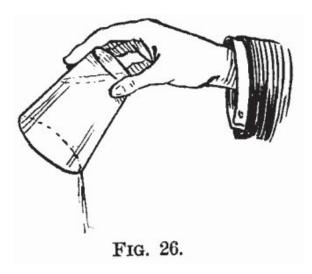
But, to produce this effect, the piece of mica had to be brought secretly over the glass. Hartz's original method of doing this was as follows: He used a glass with a foot, the foot being of exactly the same diameter as the top. The mica disc, slightly wetted on its upper side, was placed under the foot, to which, under these conditions, it adhered, and the glass could be lifted without any fear of the two parting company. Picking up the glass by the stem with the left hand, the performer placed it on the extended right hand, and invited a spectator to fill it with water. This done, he transferred the glass (without the mica) to the left hand, and then, bringing the right hand, with the mica, over the top, he

In the later versions of the trick, a disc of very thin glass is substituted for the mica, and if the glass is of large diameter, this is in some respects preferable. Again, the glass disc may be made with a rebate or shoulder round the edge, as shown in Fig. 25. The shoulder prevents the disc shifting laterally, and a glass thus covered may even be dropped into a profonde without much risk of accident,

though the performer will probably feel more comfortable for knowing that the pocket is lined with rubber, or other waterproof material.

As an alternative to the method above described for bringing the mica cover over the glass, and especially where he was dealing with a glass of large diameter. say a half-pint tumbler, Hartz adopted another plan. The cover was, at the outset, "vested" on the left side, and on the table beside the tumbler was a glass jug of the same diameter at top as the cover, filled with water. The performer, standing on the left hand side of his table (as viewed by the spectators), filled the glass three parts full, and during the momentary half-turn for that purpose, got the cover from under the vest into his left hand. He then transferred the jug to the same hand (lifting it with the thumb and fingers of that hand, placed across the top) and placed it, as done with, on a table in the rear, in so doing leaving the cover on the top of it. A moment later he decided that the glass was not quite full enough for his purpose. He picked up the jug (grasping it with the left hand over the top as before) and transferred it to the right, leaving the cover again palmed in the left. After adding a little more water, he'picked up the glass with the left hand as he had done the jug, and held it up, as if to see (through the side) how full it was, and then lowered it on to the table, in so doing leaving the cover on the top of the glass. Pretending to have perceived that it would hold a little more water, he lifted the glass up with the left hand, and made believe to add a little more, thereby confirming the spectators in their natural belief that the glass was still uncovered.

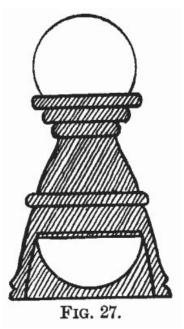
Before quitting the subject of this trick, I must not fail to call the reader's attention to the latest "wrinkle" in connection with it (the invention, I believe, of Mr. Cecil Hamley), which adds immensely to its magical effect. The only practical difference lies in the substitution of a much thinner disc of mica than that formerly used; so thin, indeed, as to be little stouter than a sheet of notepaper.



When the inverted glass, then covered, is held vertically, the water is retained as effectually as by the heavier disc, but if it be sloped ever so little, the water begins to flow out gently between the mica and the glass (as in Fig. 26), stopping again as soon as the vertical position is resumed, in obedience, apparently, to the mere will-power of the conjurer, and proving (?) to the most sceptical that no sort of cover is used.

THE MULTIPLYING BILLIARD BALL

This trick, in its original form, was, I believe, one of the many brilliant inventions of the late Buatier de Kolta. Hartz no doubt borrowed the idea of the trick from De Kolta, but, as usual with him, his working had sundry original features. Hartz was accustomed to use, in addition to two solid ivory balls and the usual half-shell fitting over either of them at pleasure, two little dwarf stands (see Fig. 27), also of ivory, but blackened; professedly to rest the balls upon, and prevent their rolling about. The foot was in each case hollow, and under one of them the half-shell was at the outset concealed,

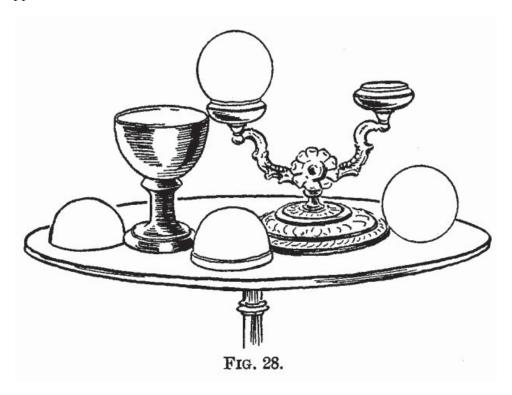


as indicated by the dotted lines, convex side downwards. A further item of apparatus was a little vase or cup, also of blackened ivory. This was fitted, like the familiar egg-cup for "vanishing" an egg, with a half—shell, which, if placed convex side upwards in the cup, appeared to be a solid ball, but if turned the other way up, adapted itself to the interior, leaving the cup apparently empty.

In preparing for the performance of the trick, one of the solid balls was vested, as was also the shell belonging to the cup. The duplicate solid ball was brought forward on the little stand under which the other shell was concealed, and offered for examination, the stand meanwhile resting on the palm of the performer's right hand. Placing the stand on the table (the shell being left behind in the right palm) Hartz proceeded, by means of the shell, to make the one ball into two. In turning to his table, he got down the second solid ball into the shell and then placed the two solid balls one on each of the stands. Again taking them into his hands, he transformed them into three; afterwards reducing the three to two again, and the two to one. At this stage he vested the shell he had so far been using, and got down in its stead the one belonging to the cup. This (professedly the solid ball last shown) he placed in the cup, dropping the solid ball into a profonde.

Then, taking a piece of tissue paper, about five inches square, he laid it over the shell in the cup (held in the left hand) and brought the right hand over it, the lower joints of the second and third fingers, previously slightly moistened, coming just over the supposed ball. A slight forward movement of the hand, with a little pressure, caused the shell to tilt over, and, assisted by the forefinger of the left hand, to perform a semi-revolution, the right hand meanwhile making a rubbing motion on the paper. This being then removed, the cup was inverted, apparently empty.

At a latter period Hartz discarded the little stands above described, and substituted, as more elegant, a two-armed brass support. This had no place of concealment for the shell, which was in this case "vested" at the outset of the trick, after the more usual fashion. Fig. 28 is a representation of the complete apparatus, in this its later form.



Mr. C. O. Williams, who is the present possessor of Hartz's apparatus for the trick, works it after an ingenious fashion of his own, as follows: At starting the cup is seen apparently empty, the shell ball belonging to it being inserted, but concave side uppermost. On the two-armed stand is one of the solid balls (which we will call A), with the second shell in a vertical position, covering that side of it which faces the audience. The other solid ball (B) is vested. The performer, taking A, with the shell on it, from the stand, makes the one into two, then privately brings up B behind the shell, palming off the latter, and replacing both balls on the stand. Then taking A, he drops it into the "cup" to show that it just fits, and by inverting the cup turns it out into the hand again, the shell belonging to the cup coming out with it. He replaces the ball in the cup (really the shell only, convex side up, the solid ball being left in the hand). Taking B, with the shell, from the stand, he transforms the one into two, and the two into three, then "vanishing" them one after the other. He finally vanishes the one in the cup by turning over the shell under cover of a little paper cone, fashioned off hand for the purpose.

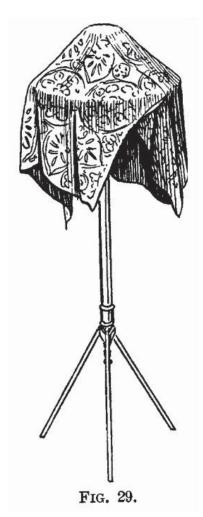
THE DEMATERIALISED GLASS OF WATER

No item of Hartz's later programmes produced so much sensation as this exceptionally brilliant feat. In effect, it was, in its original shape, as follows: A spectator is invited to come forward and take a seat upon the stage. A glass tumbler (half-pint size) is handed to him, and is filled with water, nearly to the brim. A large handkerchief or neck-wrapper, of shawl pattern, is handed to him for inspection. When he has satisfied himself that it is honestly just what it appears to be, he is asked to hold one corner of it; the performer holding another, and spreading it foursquare, that all may see for themselves that there is nothing in it. This done, the handkerchief is thrown over the glass,

which, thus covered, is then taken back by the performer. He raises the edges of the cloth, and shows that the glass, is still beneath it; but when, a moment or two later, he shakes it out, the glass has disappeared.

On a casual perusal, the trick, so far, may seem to be identical with the much older Flying Glass of Water invented by Colonel Stodare (Modern Magic, p. 367), but even up to this point there is a material difference. In that case the performer stood behind his table, and lowered the glass on to the servante. In the present instance no such expedient is available, for the operator stands quite clear of any article of furniture.

But the most surprising effect is to come. The performer throws the empty cloth over a little skeleton table, consisting merely of a disc of plate-glass, less than a foot in diameter, supported on a brass pillar five-eighths of an inch wide, and with three slender legs. The spectators can see above, below, and around it. It has no place of concealment; no cover for even the smallest object. At the command of the performer, however, the vanished glass rematerialises under the cloth, which is seen gradually to rise in the centre till it assumes the appearance shown in Fig. 29. The performer lifts the cloth, and produces from under it, not a duplicate, but the very same glass which was previously "vanished"; as may be made manifest by allowing somebody to drop a ring or a marked coin into it beforehand.



The requirements for the trick are as under:

1. The glass. This has no speciality, save that it must be one with perpendicular sides and a rounded edge. The kind of glass which is used to cover a water carafe generally answers these conditions.

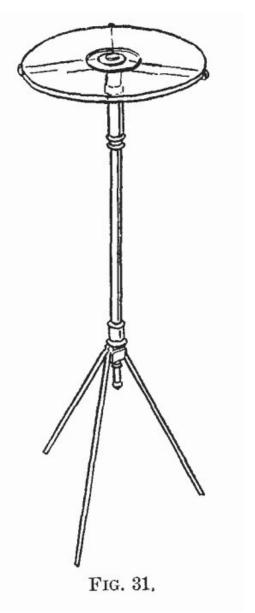
- 2. A cover for the glass. This is of zinc, with a turned-down edge, half an inch deep, and an inner rim of the same metal, so that the cover fits both over and inside the brim of the glass. The space between the two rims is rubber-lined, so that when in position the cover is perfectly watertight.
- 3. A disc of thin zinc, of same diameter as the cover. The two last items may either be vested or placed in pochettes, as may best suit the convenience of the performer.
- 4. The handkerchief. This is in reality two handkerchiefs, of cashmere-shawl pattern, sewn together round the edges, but both facing the same way, so that the fabric shall show a "right" and a "wrong" side, and so appear to be single. A fourth part of the internal space is enclosed by two lines of stitching, as shown in Fig. 30. At the point A is an opening a little over three inches long, giving access to this space. The hem, BB, along that edge of the handkerchief, is made extra thick, so as to be distinguishable by touch from those of the other three sides.



Fig. 30.

5. The table is as depicted in Fig. 31. Its top is a circular slab of plate-glass, eleven inches in diameter and a quarter of an inch thick. This is not a fixture, but merely rests on a three-armed brass support with turned-up ends, the central portion of which screws into the upper end of a slender brass pillar, five-eighths of an inch in diameter. This is, in turn, supported upon three slender wires, forming a tripod. So much can be seen at a glance, but there is a good deal about this particular table which the ordinary spectator does not see.

The central pillar is in reality a tube, crossed half-way down by a thin metal plate, in which are two holes. Immediately below this, and in contact with it, is a movable disc, just fitting the tube. This is attached to the upper end of a wire rod, terminating at its opposite extremity in a little knob, which is so fixed as to be capable of a quarter-turn to right or left. This



disc has also two holes in it, which when the knob is turned to the left come immediately under the other pair of holes; the two discs in this condition forming an open valve. If the knob be turned to the right, the openings no longer coincide, and the valve is closed.

When it is desired to show the trick, the valve is closed, as above, and the upper portion of the tube partially filled with fine dry sand. On this rests a cylindrical weight, to which is attached one end of a piece of thread about ten inches in length. This piece of thread is passed over a wire which crosses the tube about an inch below its upper end, and thence down again for a few inches. To its opposite end is attached a tiny brass socket about the size of a percussion cap. In this rests the lower end of a piece of stiff brass wire, of such a length that its upper end shall just pass through a small hole made for that purpose in the centre of the glass top. This end of the wire is capped by another little brass socket; attached by means of cement to the centre of a disc of very thin glass, corresponding in diameter with that of the tumbler used in the trick.

The normal position of the glass disc is flat on the table-top, under which circumstances it is invisible, save to a direct downward view at very close quarters. If, however, the central valve be opened by giving a quarter-turn to the little knob before mentioned, the sand trickles down into the lower compartment of the tube; the weight sinks, and the wire rod, with the glass disc on top, is forced slowly upwards, till it reaches a height corresponding with that of the tumbler.

It should be mentioned that the column can be taken apart (the various portions screwing into one another) an inch below the table-top, and again nine inches lower down, in order to facilitate the setting of the apparatus. For convenience in packing, the collar to which the three legs are attached slides up the pillar and the legs are folded against it.

Having duly digested these preliminary explanations, the reader should have little difficulty in following the working of the trick. The first stage is the filling of the glass with water, and handing it to the volunteer assistant. The next is the calling of his attention to the perfect innocence (?) of the handkerchief. After this has been duly crumpled up, drawn rope-wise through the hands, and so on, the performer, as already mentioned, gets the assistant to hold one corner of it, he himself taking the opposite corner (with the "right" side of the cloth towards the spectators) that they may see for themselves that there is nothing in it. In thus showing it he takes care to keep the thickened hem uppermost. Drawing his disengaged hand along the upper edge, he inserts the zinc disc, which he has meanwhile palmed, into the opening at A, and lets it slip down inside, when it naturally gravitates to the centre.

Now taking the handkerchief back into his own hands, he gets the cover underneath it, and in settling the cloth over the glass, works this down into position, bringing the zinc disc in the cloth just over it, covered by the left hand. After lifting a corner of the cloth to show that the glass is still there, he moves as if to return it to the assistant, and in so doing, with the right hand, removes the glass and drops it into the profonde on that side, the left hand still holding the handkerchief distended by the zinc.

The assistant is now invited to put his hand under the cloth and take the glass, but he is "not quick enough." The cloth is whisked away; the glass has vanished.

The next step is the reproduction of the glass of water. The performer explains that, appearances to the contrary notwithstanding, the glass is still in the cloth, but in a dematerialised condition. To induce it to rematerialise, the cloth is thrown over the table, its corners hanging down around. The performer now, under some pretext, lifts the table for a moment, and replaces it, usually a little nearer to the audience, "that they may see it better." He uses both hands to do this, the one high up, the other at the point where the three legs join the pillar. He is thus enabled to give the needful quarter-turn to the little knob, which projects downward between them. The valve being thus opened, the sand begins to trickle away into the lower part of the pillar, and the weight to sink down, thereby raising the glass disc under the handkerchief, the performer meanwhile making mesmeric "passes" above it. The rising movement continues till the cloth is as shown in Fig. 29. The performer with his left hand lifts up the glass disc covered by the cloth, which, thereby distended, appears to the eyes of the spectators to contain the missing glass of water. Putting the right hand underneath, he removes the short piece of wire on which it was supported, and which has remained attached by means of the little socket to the lower side of the disc.

Under cover of a half-turn to the right, he lowers the right hand to the profonde, gets out the glass, and introduces it, still covered, under the cloth, to be immediately reproduced without the cover, and handed for identification. The cloth, containing the glass disc and the zinc cover, is thrown aside, as being of no further use.

The above is a description of the trick as I myself knew it, but, as I have elsewhere stated, Hartz was never content to "let well alone" if there was a possibility of "better," and he made from time to time sundry improvements on it. I am indebted to the courtesy of Professor Herwin, of Bristol, who took special interest in this trick, and is the present possessor of Hartz's own apparatus, for particulars of his later version.

One alteration was the substitution of glass for zinc as the material of the loose disc first used. This enabled Hartz, after the disc had been inserted in the handkerchief, to hold up the latter between his volunteer assistant and the footlights, and ask him whether there was anything in it. Handkerchief and glass being alike translucent, the answer was, naturally, "No." To the ordinary spectator, knowing nothing about concealed discs, zinc or otherwise, this made the trick neither better nor worse, but it tended to puzzle the conjurers, if there were any present, and Hartz took special pride in doing this. He further substituted a glass top, accurately framed to fit, for the zinc cover, thus enabling him, after reproducing the tumbler, to show it inverted without the water escaping, after the manner now familiar.

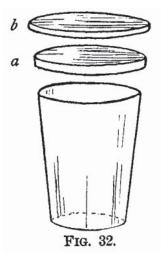
Going back, however, to the point at which the tumbler has been pocketed, though apparently still under the handkerchief, Hartz asked his volunteer assistant to hold his hands flat, the one above the other, to receive the glass, and made believe to hand it to him accordingly. Then, turning towards the table, he asked him to place it thereon, and expressed surprise when he stated that he had not got it. After some amount of byplay (searching under chairs, and so on), he came to the conclusion that the victim must have swallowed it, and would, unless at once relieved, get water on the brain. Spreading the cloth over his head, Hartz reproduced it (in make-believe, by means of the disc) from the top of his cranium. In once more offering it to him, it disappeared again; whereupon the performer, giving him up as hopeless, decided to reproduce it upon the table, first, however, unscrewing the three-armed support of the glass top, and handing this, with the top itself, for exami-

nation. Putting all together again, and in so doing introducing on top the socketted disc for the "rise," he brought it forward to the footlights. He then borrowed a handkerchief, and laid this over the top, discarding the figured one hitherto used. He then asked the assistant to say exactly where he would like the table placed and placed it accordingly, this giving him the needful opportunity to open the sand valve.

In connection with the subject of the Flying Glass of Water, it may perhaps be worth while to describe my own version of the trick, which had one or two special features, notably the suppression of the prepared handkerchief, and the use, to cover the glass, of an ordinary handkerchief, borrowed from a spectator. Further, as in Hartz's version, no servante was used.

I should premise that I made the trick a sequel or addition to that of passing a marked half-crown into a selected orange. (Modern Magic, p. 170, and More Magic, p. 172.) Having produced the desired effect, I remarked: "I have kept my word, you see. I have passed the half-crown from the glass of water into the orange. Now I am going to attempt a still more difficult feat. I shall endeavour to pass the glass of water into the half-crown. Will the owner of the coin be good enough to hold it up in full view, and I will ask you all to keep one eye upon it. You can keep the other on the glass of water, and then you will be quite sure that there is no deception." I then proceeded to carry out my undertaking after the manner I am about to describe.

The glass from which the half—crown has been vanished is, as usual, a champagne tumbler. To this is adapted a cover of thin zinc, as a in Fig. 32, with a turned-down rim three-eighths of an inch in depth. To this again, fitting loosely over it, is adapted a second cover, b, of the same material, but shallower, the rim being in this case only one-eighth of an inch deep. The inner surface of each is

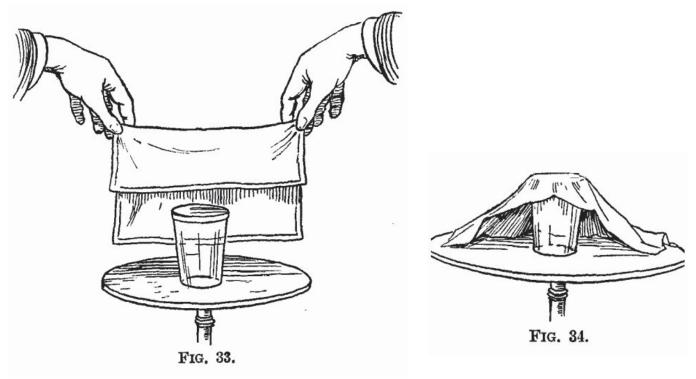


lined with thin rubber cloth. This ensures their being absolutely silent in use, besides making all more completely water-tight when fitted over the glass. These two items at the outset are "vested," the one within the other, with the inner sides next the body.

Having exhibited the glass, three parts filled with water, the performer asks for the loan of a hand-kerchief, and while this is being procured, palms, in the right hand, the two covers. The greater depth of the inner one affords ample grip for this, notwithstanding that the larger cover is next the palm. The borrowed handkerchief is taken in the left hand, and with it drawn over the glass. A mo-

ment previously, however, the right hand lifts the glass, grasping it with thumb and fingers, a foot or so from the table. This is a natural enough gesture, being designed apparently to emphasise the fact that it is merely a plain, honest glass of water, with no possible preparation or means of deception about it. The handkerchief is drawn over it just as it again reaches the table, thereby for an instant screening not only the glass, but the hand that holds it. In that instant, a and b, as one, are lowered down over the glass, and left on the top, covered by the handkerchief. The performer enquires whether all present are satisfied that the glass is still under the handkerchief. Somebody may express a doubt on the subject, but in any case, he affects to perceive that some of the company are not quite sure about it. "I see, ladies and gentlemen," he says, "that you don't feel quite certain about the matter, and as the whole point of this experiment lies in the fact of the glass being where it is until it isn't, I mean until it is elsewhere, I will show you once more that it is still under the handkerchief."

So saying, he takes hold of the handkerchief as indicated in Fig. 33, one-third of it hanging down in an even fold on the side nearer to himself, and raises it till the lower half of the glass is exposed to the audience beneath the forward fold. He then slowly lowers it again, covering the glass as at first. So, at least, the spectators imagine, but as a matter of fact the state of things is materially altered. The handkerchief is lowered down on to the glass in its folded condition, so that, as seen from be-



hind, it is as in Fig. 34. Standing behind the table, and using both hands, the performer draws down the doubled handkerchief tightly over the glass, so as to exhibit its complete shape within. "It is still here, you see. I will give you full notice before it flies away. By the way, a gentleman told me on one occasion that he saw the glass fly up my sleeve. I didn't call him what I might have done, because he was a bigger man than myself, but ever since that I have made a practice of turning up my sleeves before performing the experiment." He does so accordingly. "Now I will show you the glass once more." He lifts the glass by grasping it, under the handkerchief, with the right hand (the thumb keeping the handkerchief in position), immediately afterwards transferring it to the left hand, or

rather, appearing to do so, the left hand grasping the shape b by its edges through the handkerchief and the right hand palming away the covered glass.

"This part of the experiment requires a very steady hand, because if the water went first and the glass stayed behind, or if the glass went first and the water stayed behind, there would be trouble." As he says this he makes a half-turn to the right, and under cover of this movement, gradually lowers the right hand and drops the glass into the profonde. "Now, sir," he continues, addressing the owner of the coin, "hold the half-crown well up. I want you to catch the glass. One! Two! Three! Go!" As he speaks he brings the empty right hand up to the handkerchief again, and, in the act of shaking it out, clips b against the second and third joints of the fingers. The supposed glass has vanished. "Now, sir, if you will cut open the half-crown, you will find the glass of water."

This, mendacious though it be, is a safe assertion, inasmuch as nobody can put it to the test. The glass has magically gone somewhere, and as the audience do not know its actual whereabouts, they are not in a position to contradict the conjurer's statement.

Where, as may often be the case, a different mise en scene is employed, it may be necessary to produce the glass again. Where such is the case, it is better not to reproduce the glass previously "vanished," but another, alike in appearance, and filled to the same height with water. This, covered with rubber in the usual way, should be placed in a loading-pocket in the left breast of the coat, and thence brought under the handkerchief. Hartz, using the prepared handkerchief, with shape in centre, had a particularly neat way of producing the glass. He threw the handkerchief (assuming that the glass was in a pocket on the left side) over the right arm, held horizontally in a bent position in front of him, and with the left hand took hold of the shape through the handkerchief, and slowly raised it. All eyes were naturally drawn to this, naturally supposed to be the glass, and meanwhile the right hand, under cover of the handkerchief, got hold of the actual glass, and brought it under the shape, to be immediately afterwards exhibited, uncovered.

CARD, COIN, AND CANDLE

This can scarcely be correctly described either as a "card" or a "coin" trick, though both a card and a coin figure among the needful "properties." It is in truth a happy illustration of sleight-of-hand plus sleight-of-head, and has received the compliment of imitation, with more or less success, by many leading performers. Neither of them, however, quite follows the working of the inventor; and, without any disparagement of the later versions, it may be remarked that there are one or two little secrets in the original which the imitators never completely fathomed.

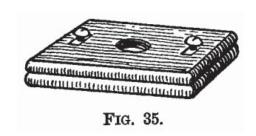
In effect, the trick is as follows: A borrowed six-pence, marked by the owner, is wrapped in one half of a cigarette paper across which a word or sentence has been written by a second spectator, the other half of the paper being retained by the writer. A card is selected by a third member of the audience, and kept in full view. The wrapped-up sixpence is held over the flame of a candle, when coin and paper both disappear with a flash. The marked coin is found imbedded in the very substance of the chosen card. The candle having been extinguished and cut into four pieces, the audience is invited to choose one of them. In the piece selected is found a bit of paper in which the coin was wrapped, unmistakably recognisable by the writing upon it.

A person with no knowledge of conjuring, witnessing the above feat, would be almost inclined to cry "A miracle!" There appears to be no possible loophole for deception. The coin was marked. The paper was marked. The card was freely chosen, and has never been lost sight of. The marked coin has found its way into the chosen card, where it certainly was not when the card was drawn; and the marked paper into the chosen portion of the candle, which almost up to that moment has been burning on the table. A miracle, decidedly!

The more instructed reader will, of course, come to a different conclusion. No one knows better than a conjurer the weakness of circumstantial evidence, for on circumstantial evidence nine-tenths of his illusions are based. But even the best instructed reader will hardly be in a position to suggest off hand the actual working of this complex feat.

The requirements for the trick are as follows:-

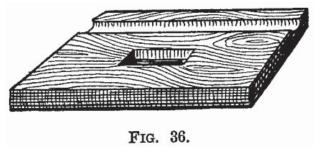
1. A card, say the queen of spades, which has been split apart, and has had a marked sixpence inserted in the centre, between the back and the front; the two surfaces being then pasted together again, as a first. A court card is better than a plain card for this purpose. To ensure a satisfactory result, Hartz dried the card in a miniature press, devised by himself for that purpose. This, illustrated in Fig. 35, consisted of two slabs of hard wood, six inches in length, by two and a half in



width, and half an inch thick, drawn together by thumbscrews. A circular piece, an inch in diameter, was cut out of the centre of one of the blocks, to allow of the two surfaces of the card being pressed

up flat round the coin. In the case of a card thus prepared, there is no sign of the manner in which the coin was introduced, the very slight bulge occasioned by its presence being only perceptible at the back of the card. (This little press, by the way, is also very useful for pasting two cards back to back when necessary. When it is used in this manner a thin zinc plate is laid between the card and the circular opening.)

- 2. A marked sixpence, exactly resembling the one inserted in the card.
- 3. A pack of cards, with three or four extra queens of spades on top; and upon these the prepared card. These are kept in order till needed by a rubber band passed longitudinally round the pack.
- 4. A cigarette paper, folded in half, the marked sixpence above referred to as No. 2 being laid between the folds.
- 5. A lighted candle in candlestick.
- 6. Knife, for cutting the candle. This has a round black handle, apparently of horn, and is in general appearance like an ordinary kitchen knife. As a matter of fact, however, the handle is of metal, japanned, and has a cylindrical cavity at its lower end, in which is inserted the next item, viz.:-
- 7. A piece of candle, one quarter the length of a whole one. From one end of this the wick has been removed, leaving a cavity about an inch long, and a little over a quarter of an inch in diameter. The knife, with this inserted (excavated end outwards) in the handle, lies on a chair or side-table.
- 8. A wooden slab, painted black, eleven inches in length and eight in width, and one inch thick, but bevelled at the edges, thus making it look somewhat thinner than it actually is. A shallow groove or depression, half an inch wide, extends from end to end. The ostensible object of this bit of board, as it professes and appears to be, is to serve as a block to cut the candle on, and so prevent damaging



the top of the table used, which in Hartz's case was, after his usual fashion, of plate-glass. In reality, however, this supposed bit of board is hollow, and just behind the groove above mentioned is a spring trap, eight inches in length by one and a half in width, opening longitudinally (hinge to the front) whenever pressure is applied to a little square stud near one corner of the board.

9. A rod of wood, the size of a pencil, six inches long, with a wooden base or foot. In its upper end was a notch, used later to receive the folded cigarette paper.

10. A wire rod, three feet in length, with a clip at the top, and pointed at the bottom. This is thrust into a socket in the stage, and serves to hold the chosen card in full view.

The various items, other than the last mentioned, are, at the outset, all placed on the performer's table, which in Hartz's case was, as already mentioned, a circular slab of plate-glass supported on a slender brass pillar with tripod foot, as illustrated in the last chapter. He has also, in a clip beneath the vest, a bit of "flash" paper, folded as if it contained a sixpence and bearing the impression of one previously placed in it, but again removed.

When about to exhibit the trick, the performer steps up to his table, and picks up the cigarette paper, having his own marked sixpence in its fold. He asks some one to lend him a sixpence, but first to mark it, that he may be sure of knowing it again. While this is being done, he asks some one else to write a name or a sentence on the cigarette paper, which he hands him for that purpose, his own sixpence being allowed to slide out of the fold, and being retained between the forefinger and thumb of the right hand. When the other sixpence has been duly marked, he takes this also between the finger and thumb and examines the mark. He observes that it is hardly as plain as it might be, but it will do, or something to that effect, and, so saying, hands it to some other spectator (not too near to the first), requesting him to notice the mark. In so doing, however, he "changes" the coins, by the simple expedient of sliding the one over the other, so that it is the coin with the conjurer's own mark that the second spectator takes note of.

The cigarette paper is then torn in half, thereby dividing the writing on it. One half is left in the hands of the writer. In the other the (substitute) sixpence is wrapped and handed to the performer, who for the moment carelessly throws it on the "run-down" in front of the stage, or on the stage itself, requesting the audience to keep an eye upon it.

He now goes to the table to get the pack of cards, and in picking this up leaves the genuine sixpence on the table. Removing the rubber band from the pack, he invites some one to draw a card, forcing one of the unprepared queens of spades. Bringing the duplicate cards back to the top of the pack, he takes the drawn card, and changes it (by means of a filage) for the top card, which is the prepared queen. This he inserts in the clip of the wire rod, stuck in the floor of the stage. He then picks up the paper containing the sixpence, and going to the table, proceeds to insert it in the cleft of the little stand, in reality inserting instead the empty flash paper from under the vest. Meanwhile the disengaged hand opens the genuine paper, extracts the sixpence it contains, and drops this into a pocket; the paper itself being rolled between the fingers into the form of a little plug, about an inch long and an eighth of an inch thick. In the act of picking up the knife, he inserts this plug into the cavity of the prepared piece of candle. As if bethinking himself, he lays the knife down again, and taking the piece of paper (ostensibly containing the coin) from the little stand, he holds it to the candle-flame, flashes it off, and shows the hands empty.

The next step is to blow out the candle. While doing this he secretly picks up the borrowed sixpence from the table, and conceals it in his right hand. Then, picking up the prepared card, he explains that the sixpence has passed into the card. Going to the person who took note of the duplicate sixpence, he asks him to bear witness that there is really a coin in the card, but no opening through which it could have got in. Having testified to this effect, he is invited to tear the card across, and see whither the coin within is really the marked sixpence. He asseverates, in all good faith, that it is so. The per-

former then taking the coin between the forefinger and thumb, which already hold the genuine sixpence, crosses over to the lender and returns him his property; in the act of so doing changing the coin for the original by sliding the one over the other in manner already described.

He next calls attention to the candle. Blowing it out, he lays it on the wooden slab, and after cutting half an inch or so off the wick end (which would otherwise be inconveniently identifiable) divides the remainder into four equal portions. He now invites the company to select one of the four pieces, meanwhile allowing the prepared piece of candle to slip out of the knife-handle into his right hand, and transferring the knife to the left. In apparently picking up the chosen piece of candle with the right, he brings down the loaded piece, which is resting against the first and second joints of the fingers, just over the chosen piece, at the same time drawing the latter slightly towards himself. Meanwhile the haft of the knife, in the left hand, is pressed for a moment on the little stud before-mentioned, thereby opening the trap. The chosen piece forthwith passes into the cavity below, the "faked" piece being exhibited in its place. The other three pieces remain as they were.

In his later performances of this trick, Hartz discarded the wooden slab in favour of a dummy pack of cards, which was substituted, after the desired card had been forced, for the pack previously used. This pack (see Fig. 37) was hollow, and the top card was cut so that part of it should form an oblong

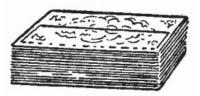


Fig. 37.

trap, opening along the centre, and extending to nearly the whole length, and half the width, of the cards. In the diagram the dotted line indicates the spring "hinge," and the central line the opening. This is placed on the table, with the "trap" side away from the spectators. After the candle has been divided, the performer places the selected piece on the forward portion of the pack as if to enable the audience to get a better view of it. He then remarks "I think I have cut this piece a little too short; do you mind my taking one of the others instead?" As he speaks, he brings down the right hand, holding the prepared piece over it, and pushes the chosen piece down the trap, immediately showing the other in its place. To all appearance he has merely picked up the piece chosen. The audience naturally hold to their selection; or if not, he himself says: "But perhaps it will be better to use the piece you chose."

We will suppose that by the one means or the other the piece of candle has been changed. Bringing forward a plate, the performer asks some one to hold it. He then shows, apparently, a portion of wick at each end of the piece of candle, the rolled paper, if neatly inserted, making, to casual inspection, a very fair substitute. If he sees, as he can at a glance, that this result has not been attained, he does not show this end, but begins at once to pare away the wax from the opposite end, on to the plate. When the bit of paper is reached, he asks the person holding the plate to draw it out and unfold it. It is compared with the half retained, and is found to be the original.

THE WINE AND WATER TRICK

This again Hartz worked after a fashion of his own. Of the Wine and Water trick there are many versions. In all the root idea is the same: viz., that wine and water, mixed in a small decanter or carafe, again separate, and pass into two glasses placed one on each side of the decanter; the wine into the one, the water into the other. The decanter and glasses are necessarily covered over during the process; and in the original form of the trick the covers were imposing pyramids of tin, in whose upper regions were secret compartments holding the fluids to be produced. The trick in this form belonged to the "false bottom" school of conjuring, now, happily, extinct.

A later and more elegant version will be found described in More Magic, p. 376. To this version Hartz's method had considerable affinity, but it had sundry features of its own which seem worthy of a brief description.

To give the trick a properly magical character, the spectators have to be convinced on two points: first, that there is no natural means of escape for the wine in the decanter; and secondly, that the covers used are really covers only, and are not directly accountable for the reappearance of the wine in the glasses. Hartz's working met both these conditions. The covers for the glasses were mere cardboard cylinders, open at each end; just wide enough to go over the glasses, and overtopping them by a couple of inches. The cover for the decanter was merely a borrowed handkerchief, and the stand on which it was placed was a miniature stool or table, the various parts of which were offered separately for examination, and put together under the eyes of the spectators.

So far as the reappearance of the wine in the glasses was concerned, the secret lay in the fact that after the pasteboard tubes had been examined by the audience, the performer loaded into one end of each a metal cylinder, fashioned like a somewhat massive napkin—ring; in depth not quite two inches, and of such diameter externally as to fit neatly within the pasteboard tube. Each of these cylinders was hollow, and between its inner and outer walls there was sufficient space to accommodate a wine-glassful of the necessary fluid, water or wine, as the case might be. The upper edge was turned over just enough to prevent the fake passing too far into the pasteboard tube, and in this same edge was an air-hole, plugged till it became necessary to use it. At one point of the lower edge was a little spout, which, when the loaded cover was in position, came just over the edge of the glass. The brass receptacle being tubular, the performer was enabled to pass his wand through the pasteboard cover, or even to allow a casual glance through it, after the fake had been placed in position, thereby proving (?) up to the last moment, the absence of preparation.

The stand for the reception of the decanter, save for its greater height (about six or seven inches), was not unlike the familiar "card tripod," being supported on three legs, crossing each other half-way down, and fitting at bottom into sockets in a triangular base or foot. As first submitted to inspection it was in six portions: viz., the top; the base; the three legs; and a wire triangle serving to bind the legs together at their point of junction. To all appearance nothing could be more innocent. The top showed a clear unbroken surface, and the legs appeared to be rods of solid metal. As a mat-

ter of fact, however, one of the supposed rods was a hollow tube, closed by a plug at each end, so well disguised as to attract no attention, but readily removable by the practised fingers of the conjurer.

The various parts having been duly examined, the performer collected them, and during the return journey to his table twisted out the two plugs last mentioned. He then began to put the various parts together. The three legs were screwed into the top, the wire triangle holding them together at the centre, and their lower ends being fitted into the appropriate sockets in the base. The performer then, putting one hand over the top and the other under the base, pressed all the parts well home. Such, at least, was what he appeared to do, but under cover of so doing, he at the same time twisted off, and palmed, a false top overlying the true top, which was perforated, to allow of the escape of the wine through the hollow leg into the base.

The conception of the false top, manipulated as above, was a stroke of genius. It fitted tightly over the true top, and so long as the apparatus remained in parts, could tell no tales; for the two could not possibly be separated until the legs, screwed into the under side of the true top, furnished the necessary hold.

The apparatus had a further speciality. As the reader is, of course, aware, to allow the wine to escape through the very small hole in the bottom of the decanter, air must be admitted above. This is usually done by removing the stopper; but it seemed to Hartz that the effect would be more magical if the liquid disappeared from a closed vessel, and, true to his life-long policy of endeavouring, in poker language, to "go better" than his confreres, he decided that the stopper should remain in the neck of the decanter. To allow of this, he devised a special form of stopper. This was a rubber cork, silver-mounted, like those frequently used for spirit decanters. But the knob at the top, though apparently a fixture, was in reality movable, being attached to a wire rod passing vertically through the centre of the cork. At the opposite end of this wire was a conical rubber plunger, adapting itself to a cavity of similar shape in the lower part of the cork. A minute hole was bored through the upper part of the cork into this cavity. The knob and plunger had about an eighth of an inch of vertical play; and in conjunction with the hollow in the cork formed a valve, air-tight when the knob was raised, but open when it was depressed.

For stopping an air-hole in this or any similar trick, Hartz used a tiny plug of rubber. This could be removed by the fingers with ease and certainty, which is not always the case with the wax pellet ordinarily used.

The mention of the Wine and Water trick recalls another feat which I believe was not exhibited by any one but Hartz, viz., the conversion of bran into wine, or water and goldfish. This effect was produced by means of a modification of the familiar "bran-glass." (Modern Magic, p. 383.) The metal shape which represented the bran was made water-tight, and round its lower edge was, cemented a strip of soft rubber.

The shape, thus prepared, duly covered with bran, and filled with appropriate liquid, was placed in an inverted position, in a box containing loose bran. The glass, after being shown empty, was dipped into this, and brought up full of bran. To prove "no deception;" the performer let the bran run back into the box; after which he again lowered the glass into the box to fill it. This time, however,

he brought it straight down over the inverted bran shape, pushed it well home, and turned the glass over, the hand which had apparently been used to fill it leaving on the top of the shape a handful of loose bran. This was brushed off. The glass was then covered, as described in Modern Magic, and the shape, a few moments later, lifted off within the cover. The rubber fillet round the edge of the shape effectually prevented any premature leakage.

THE WITCHES' KETTLE AND MAGIC PUNCH BOWL

The Witches' Kettle is a trick belonging to the old—fashioned "heavy-luggage" school of conjuring, and while the existing preference for a minimum of visible apparatus continues to hold sway, is not likely to be frequently met with. But "the whirligig of time brings strange revenges," and it would not be safe to assert of any trick that it may not, at some time and in some shape, be resuscitated.

In effect the trick was briefly as follows: A large cauldron, or gipsy kettle, is suspended, by means of a cross-piece between a pair of tressels, in the middle of the stage. Sundry pails of obviously real water are poured into it. A cover is clapped on the top, and a fire or spirit-lamp lighted underneath it. After a brief interval, and the firing of a pistol for the sake of effect, the cover is removed, when three or four ducks or pigeons fly out. The cauldron, being turned upside down, is found to be empty, every drop of the water having disappeared.

In what may be called the standard method of working the trick, one of the supports, as also the cross-piece and the handle by which the cauldron was suspended, is hollow; and these together form a pipe or syphon through which the water poured into the cauldron is secretly pumped out again into a receptacle below the stage. The cover has a broad flange or collar round it, fitting into a shallow tin pan of similar depth, attachable or detachable at pleasure by means of a couple of "bayonet" catches; and this again fits into the mouth of the cauldron. When preparing for the trick, the birds to be produced are packed in this pan, to which the cover is then secured by means of the bayonet catches. The two, in appearance a cover only, are placed at the proper moment on the cauldron. When the performer (having previously got rid of the water) desires to produce the birds, a twist of the lid disengages the cover from the pan and the birds fly out, the pan being left behind. The performer replaces the cover, but, bethinking himself that he has not shown the kettle empty, again removes it, this time bringing the pan away with it, when all is left clear to the bottom.

The working adopted by Hartz was considerably more artistic, though the members of an average audience would scarcely be qualified to appreciate its superiority. The points in which it differed from the older working were two. First, the cauldron was suspended by a single piece of ordinary cord, thereby apparently barring any possibility of the pumping expedient being employed; and secondly, the cover used was shown to be just a plain lid, with no possible place of concealment for the birds.

The trick was worked as follows: The performer, standing close to the cauldron, poured into it the water, of which three or four pails in succession were brought from the wing, and handed to him by his assistant. Now, in the first place, the pails were deceptive, the bottom of each being only half-way down, and the pail therefore holding only half as much as it appeared to do. Secondly, the performer, when he took up his position beside the cauldron, dropped into it from his trouser-pocket

one end of a rubber tube which passed down his trouser-leg. From the position in which he stood, the lower end of this tube came just over a small opening in the stage. Through this opening a further length of tubing was connected with it from below, and through the two combined the water was pumped away as easily as in the older version. The birds to be produced (which in Hartz's case were pigeons) were stowed in the bottom of the cauldron, within a space closed by water-tight spring doors, with a normal tendency to fly open, but kept closed by a catch. At the proper moment the catch was withdrawn. The doors flew open, the birds flew out, and the trick was done.

The Magic Punch Bowl may be regarded as the converse of the Witches' Kettle trick.

A handsome cut-glass punch-bowl is exhibited. The brim is boldly scalloped, but the bowl has no other speciality, and it is clearly empty. And yet, no sooner has the performer placed it upon his table, than it begins to fill with punch, which the performer ladles out, and distributes to the company.

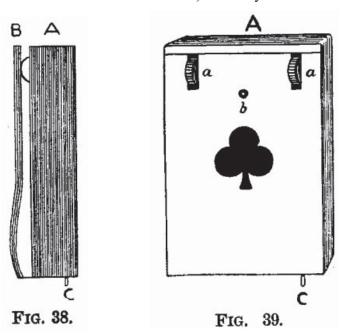
The secret here lies in the fact that behind the scenes, a little above the level of the top of the bowl as it rests on the table, is a receptacle containing a supply of the necessary fluid. From this a rubber tube is carried under the stage, up the leg and half-way across the back of the table. The end of this, terminating in a short piece of metal tubing bent into the shape of a hook, lies on the servante till needed.

In placing the bowl on the table the performer brings this bent tube over its hinder edge, resting between two of the scallops. The supply of punch is turned on behind the scenes, and the performer has nothing to do but to ladle it out; at an appropriate moment dropping the tube back on to the servante, and placing the nearly full bowl, as if for greater convenience, on a second table nearer the spectators, and continuing the distribution; the idea thereby induced being that the bowl continues to refill itself under these altered conditions, and such belief on the part of the spectators materially enhancing the effect of the trick.

THE AUTOMATIC RISING CARDS

Hartz was the first wizard to work the trick of the Rising Cards in this, its most magical, form. The mechanical pack was his invention, and for many years he enjoyed a monopoly of it, all attempts to produce any satisfactory imitation proving failures. Ultimately, he made up his mind to part with the secret, and allow the apparatus to be copied, so that it has now become common property. It has been slightly modified by later reproducers, but in all essential particulars the only reliable packs now used are copies of Hartz's original model.

The pack used by Hartz himself in his performances lies before me as I write. It is in two parts, A and B (depicted in side elevation in Fig. 38), between which are inserted the cards intended to rise. The hinder portion, A, consists of some forty-five cards pasted together, but having their central portions (other than those of the back and front cards) cut away to allow of the introduction of the



necessary mechanism. The front portion, B, consists of four cards only, likewise pasted together, and made to bulge slightly forward a little below the centre by means of a thin brass tongue two and a half inches in length, glued vertically between them. The only connection between A and B is by means of this tongue, which projects from the bottom of B, and is turned up square at its lower end, so as to form a clip fitting into the lower part of A. Matters are so arranged that at this point A and B are a fraction of an inch apart, but at top, for about one-third of its length, B presses slightly against A. By drawing B downwards for a quarter of an inch the up-turned tongue can be withdrawn from A, and the two parts disconnected at pleasure.

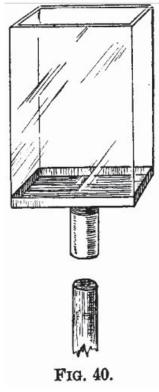
The working mechanism is contained wholly within A, its only visible portions being two little rubber—covered wheels, a a, which project through slots cut in the foremost card, as shown in Fig. 39.

The mechanism is in principle not unlike that of a musical box; save that the barrel and comb are omitted. Two brass plates, the lower one measuring three by one and three-quarter inches, the upper one three-quarters of an inch shorter, are held together, at a distance of three-eighths of an inch, by a pillar at each corner of the smaller one. Between these two plates is fixed a spring-barrel, which is wound up after the manner of a watch; b, in Fig. 39, indicating the hole for the key. The barrel is connected by an intermediate train with a "crown" or "contrate" wheel, which in turn is connected with the arbor, or spindle, on which the two little wheels, a a, revolve. From about half the circumference of the contrate wheel the teeth are cut away, for a reason that will presently appear.

When the mechanism is set in motion, which is effected by upward pressure on a pin, c, projecting about. a quarter of an inch from the pack at bottom, the little wheels a a begin to revolve, rising to the front; and if three or four cards have previously been inserted between the two parts of the pack, the card for the time being in contact with a a will be forced slowly upwards, save when the toothless portion of the contrate wheel comes into operation. During this period, though the train is still running, no movement is communicated to the little wheels a a, which accordingly come to a temporary standstill. When the toothed portion of the contrate wheel is again reached, their movement recommences. The speed of the movement is controlled by a "fly" regulator, and the mechanism is so delicately adjusted that its working is inaudible, at a distance of even three feet.

When the pack is in use, the upward pressure on the pin c is supplied by the weight of the pack itself. When it is desired to make the cards rise, the pack is placed in a holder (see Fig. 40) just large enough to contain it. This has plate-glass sides and a metal bottom, to the under surface of which is soldered a socket to receive one end of a wooden rod, about a foot long, which serves as a handle to hold the apparatus aloft that all may see it.

Hartz's method of changing the pack was, as usual, peculiar to himself. The mechanical pack, with the four cards intended afterwards to rise already in position, was placed in a tin case of appropriate size, closed at one end, but open at the other. A space was provided at one corner of the closed end, to receive the pin, and protect it from premature pressure. This case was suspended by means of a ring at top, open end downwards, beneath the vest, the pack being prevented from falling out by a swinging wire loop, which crossed the opening near one corner. This was loosely pivotted to the case at back and front, and normally hung straight down, crossing the lower end of the pack; but a mere touch with the finger sufficed to push it aside, when the pack, deprived of its support, slipped down into the hand.



The mechanical pack being thus held in readiness, and the glass holder, for its reception later, being placed upon the table, the performer comes forward with an ordinary pack of cards and "forces" four of them, corresponding with those which are intended to rise. These having been replaced, and the pack shuffled, he returns to the table to get the glass holder. He picks this up with the left hand, and during the momentary turn for that purpose, the right hand drops the cards which it holds into the profonde, and secures in exchange the mechanical pack from under the vest. This is laid upon

the table, while the glass holder is tendered for examination; after which the performer fits the wooden rod into the socket, and hands it to a spectator to hold aloft. Addressing the person who drew the card corresponding with that arranged to rise first, he asks him to name his card. He then places the pack in the glass receptacle, and orders that card to rise. The weight of the pack, pressing on the pin c, starts the train, and the card rises accordingly. During its upward progress, the performer asks the name of the second card, and when the first card has risen to its full height, and has been removed, the second card is ordered to rise in like manner, and so on, according to the usual routine of the trick.

The reader may here be reminded of a special feature of the apparatus, as yet unaccounted for; viz., the removal of a portion of the teeth of the contrate wheel. The object of this is to render the upward movement of the cards intermittent, and a little reflection will show the necessity of this. If it were not so, a second card would follow instantly upon the heels of its predecessor, without waiting for invitation, and the theory of the trick (viz., that the cards only rise at the command of the performer) would be somewhat rudely disturbed. The brief interruption of the lifting movement after the appearance of a given card affords the performer just the time he requires to enquire the name of, and call for, the next one. A similar stoppage likewise occurs midway during the upward progress of each card, but this heightens the effect; a partial rise, then a stoppage, and then a further rise being less suggestive of a mechanical force (and therefore more magical) than a continuous upward movement would be.

As I have already mentioned, the mechanical packs in use at the present day differ from Hartz's in sundry small points of detail. The little wooden wheels are in some cases covered with sandpaper in place of rubber; and in others encircled by little sharp metal points, after the fashion of a spur, those of the latter make being probably the more certain in operation.

Another difference is in the method of starting the movement. The pin at bottom is replaced by one projecting upwards from the top of the pack, and operated by moving it a fraction of an inch from right to left, or vice versa. This arrangement places the mechanism more completely under the control of the operator, who can, by a touch of his finger in the act of removing the card just risen, bring the apparatus to a standstill. The power to do this is useful, as enabling the performer to give a more dramatic form to his mise en scene. An example is found in the version adopted by Herr Willmann, who has made somewhat of a speciality of this particular trick. His working is as follows:-

Three cards only are made to rise, but one of them (the queen of clubs) rises in the first instance with its back to the company, appearing subsequently in the proper manner. To produce this effect the mechanical pack is prepared by placing two queens of clubs, back to back, next the friction wheels, and a few loose cards, of any description, on the face of the pack, the only requirement as to these being that the outermost shall be a duplicate of the bottom card of the pack offered to draw from; so that no difference of appearance shall be perceptible after the exchange of packs. The pack thus prepared is laid face downwards on the performer's table, screened from view by a crumpled handker-chief.

The performer advances with the ordinary pack, forces the queen of clubs, and has two other cards freely chosen. Leaving all three in the hands of the drawers, he steps back to his table, lays down the remaining cards close beside the mechanical pack, and brings forward for inspection a glass goblet

with perpendicular sides. When this is returned, he places it on the table and drops into it, apparently, the pack previously used, but in reality the mechanical pack, the other being in turn covered by the handkerchief. In placing the pack in the glass, he, as if by accident, raises the loose cards in front an inch or two, and lets them fall back one at a time, thereby inducing a belief that the whole pack is made up in the ordinary way of separate cards.

Having duly settled the pack in the glass, he takes back the drawn cards, and, without looking at then himself, exhibits them to the company. He then inserts them in the pack, apparently haphazard. As a matter of fact, however, the two indifferent cards are placed behind the two queens already in position, and the forced queen among the loose cards in front. He next proceeds to "mesmerise" the cards, first rubbing the right hand along the left coat sleeve, "to generate," he says, "a little animal magnetism," and then passing it gravely backwards and forwards over the pack. The drawer of the hindermost card is invited to name it, and that card is ordered to appear. Picking up the glass, the operator passes his wand over and round it with due solemnity, and in replacing it on the table, moves the little lever to the right, thereby starting the clockwork train.

The card rises and is removed in due course, after which the second card is called, and appears in like manner. In removing this card, however, the performer reverses the little lever, and so arrests the movement. He says carelessly: "I shall now commad the third card to rise." Naturally, nothing happens and he simulates some amount of discomfiture; going to the table and looking down anxiously at the pack tapping the glass with his wand, and so on. When has thus induced his audience (or such of them as are unfamiliar with the wiles of conjurers) to believe that the trick has somehow broken down, he says, as if uncertain: "I am right, am I not? There were three cards drawn? May I ask you to name the one that is missing?" He is told that it is the queen of clubs, whereupon he explains, after the usual fashion, that that accounts for the non-appearance of the card. Queens are not accustomed to be ordered about, and so on. He will, however, endeavour to set matters right. He accordingly takes the glass in his hand, and addresses the queen in apologetic language, assuring her that there was no intention to offend, and begging her to rise and not put him to shame by spoiling his experiment. Holding the glass to his ear, he makes believe to hear the queen reply that she isn't quite dressed; she hasn't finished doing up her back hair, or something to that effect. All this he duly reports to the audience. Finally, he entreats Her Majesty not to keep the company waiting, but to come just as she is. He puts down the glass on the table, and as he does so, again starts the clockwork train. The card now rises, but with its back to the company. The performer expresses his astonishment at such unlady-like behaviour, and replacing the card, still reversed, among the loose cards in front, begs Her Majesty to come up properly, which she does, i.e., the duplicate queen, facing the right way, makes its appearance.

THE PORTFOLIO TRICK

Of this formerly very popular trick there are two or three versions. The root idea is the same in all, viz, the production of a quantity of articles of considerable bulk from an ordinary-looking drawing portfolio which, without the aid of magic, would be clearly inadequate to contain them. (Modern Magic, p. 468.)

In the usual method of working, the greater number of the articles to be produced are of a collapsible nature, and are concealed in the portfolio from the outset; the spectators being prevented from suspecting this by the fact that other articles, of a manifestly non-compressible order, are also produced; these latter having been concealed on the person of the performer.

It cannot fairly be claimed for Hartz's working that it was any better, taken all round, than the current version; but it was distinguished by his customary dash of originality. The special feature in his case was the fact that the portfolio could be shown to be empty, not only at starting, but at any stage of the trick.

The explanation lay partly in the portfolio itself, and partly in the table on which it was laid during the performance of the trick. The former was made pocket-book fashion, the covers being united on each side by a gusset of black calico, of such dimensions as to allow of their being opened to an angle of about 60 degrees, but not to any greater extent. When the portfolio was laid on the table and opened, these gussets concealed the operations of the performer standing behind it; and this was naturally assumed by the spectators to be the reason of their existence. As a matter of fact, however, these particular gussets were not seen at all during the production of the various objects. The upper part of the table formed a box, and in the top of it was a sunk flap, hinged on the side facing the spectators, and a trifle less in area than the portfolio. This flap likewise had a gusset on each side, corresponding with those of the portfolio, secured at its lower edges to the interior of the table.

For the performance of the trick, the portfolio was laid flat on the table. It was then apparently opened, but in reality both sides were lifted together, and with them the flap of the table, the gussets at the sides of this representing, to the eye of the spectator, those of the portfolio.

Under these conditions the performer had merely to develop and produce the various articles with which the table had been previously loaded.

In connection with this subject, I may take the opportunity of mentioning another version of the trick which may possibly be interesting to the reader. The portfolio is in this case used in conjunction with a table having a servante, and is of small size, measuring, say, eighteen inches by twelve, or thereabouts. It folds quite flat, and is at the outset shown to be empty. The decoration of the covers is an essential point. In the centre of each is an oblong panel, with a narrow gilt border, and having a margin of about two and a half inches all round it. The panel of the cover, which in use is

undermost, is cut out, and is glued to an intermediate flap or leaf of cardboard, lined on its upper side to match the inside of the upper cover.

When, at the outset of the trick, the portfolio is exhibited, inside and out, to prove it empty, this intermediate flap is held close against the lower cover, and apparently forms one with it. But when placed on the table for use, the flap is lifted with and held against the upper cover. The panel-space is thus left open, and by drawing the portfolio back a little, the opening is brought over the servante, on which the articles to be produced (in this case small affairs, such as reticules, multiplying balls, or toys for distribution) are beforehand placed.

In this case also the performer can at any moment close the portfolio, bringing the flap against the lower cover, and then, reopening it, show it empty.

THE SECOND-SIGHT TRICK

This was worked by Hartz after a rather elementary fashion, having nothing in common with the elaborate system devised by Robert-Houdin, and subsequently reproduced, with more or less modification, by Robert Heller and others.

I never had the good fortune to see the trick exhibited either by Robert-Houdin or by Heller, though I have witnessed many later versions of it, probably not less effective. The most finished, and in some respects in advance of any other which I have seen, is that of a distinguished amateur, Sir Alfred Cooper. I am not at liberty to publish the details of his code, though I have the good fortune to possess them, but I may mention, as a "tip" of the greatest value to any one interested in the subject, that one of the special features of his system is the holding in reserve, by the blindfolded medium, of the main part of the information conveyed by the question, so that a moment or two after he may volunteer, unasked, various additional details. The adoption of this plan, adds enormously to the effect of the feat. For instance, a question is put as follows: "Please tell this gentleman, sir, what this is."

The question, thus worded, tells the "medium" that the object handed up is a railway season ticket, first-class, and that the two first figures of the number on it are 15. But he holds the greater part of this information in reserve, merely saying: "It looks to me like a ticket."

The questioner proceeds: "Quite right; but cannot you tell me what sort of ticket?" This further question tells the medium that there are two more figures, viz., 51, to complete the number, but he merely answers: "I see that it is a railway ticket." At this point he makes a distinct pause, that the audience may notice that no further question is asked, and then says slowly, as if making a mental examination of the object: "On looking at it I see that it is a season ticket. It is first-class" (pause) "and the number appears to be 1551."

Again, a watch is handed up. We will suppose that the question put is: "Can you describe this now?" These words, few as they are, convey a great deal. They tell the medium that the article is a gold "hunter" watch, and that the time by it is two minutes later than an approximate time agreed upon between the two performers beforehand, say, ten o'clock. He holds all these particulars in reserve, replying simply, "It is a watch," and waits to see whether the interrogator speaks again. If not, he proceeds, with due deliberation, to give the above details. If any further question is asked, he knows that it is a clue to the number of the watch. Thus suppose the interrogator proceeds: "Good! Kindly tell me what kind of watch."

This tells him that the number begins with 810. He takes mental note of these figures, but merely replies to the question asked, "I see it is a hunter, and again waits. If no further question is asked, he would assume that 810 is the complete number, but we will suppose that the principal performer says: "Well! what else?"

This gives him the figures 20. He says slowly: "I see it has a gold case" (pause) "and the time by it is two minutes past ten. Now that you have opened it, I see that the number is" (pause) "81,020."

These two instances are not imaginary, but are samples of the trick as actually worked by Sir Alfred Cooper. It is obvious that most objects would not require, or indeed admit of, such minute particulars, but the code is so arranged as to allow of precise description of almost any conceivable article. As illustrating its extraordinary completeness, I may mention that there are no less than ninety cues for the names of coins alone, and that the total number of cues has grown year by year till it is now considerably over twelve hundred! Even one acquainted with the secret, and as a mere feat of memory on the part of the performers, the trick is a marvel. To the uninitiated it seems impossible to doubt that the medium, by some clairvoyant faculty; really sees the articles he is describing.

But the effect of a trick is by no means in direct proportion to its complexity, and it is not unlikely that Hartz's rough and ready working created in its day as much astonishment as is produced by the most perfect "code" system.

The method which he employed is as simple as it is audacious, and as audacious as it is simple. The performer asks the loan of a hat. The request being granted, he further asks the owner to take it round among the company and collect in it any small articles they would like to have described, he himself meanwhile blindfolding the medium, or inviting some one else to do so. When some twenty or more articles have been collected, he takes the hat, receiving it in his left hand, and having just previously palmed in the right (from a pochette or from the servante) a number of small articles of his own, say a ring, a locket, a shilling, a foreign coin, a tram ticket, a pen-knife, a toothpick, a key, and a silver matchbox, all held together by a rubber ring. These articles (some of which will, in all probability, be practically duplicates of objects actually collected) the medium has memorised in a particular order, taking careful note of any useful details, such as the dates of the coins, a crest upon the matchbox, the number and kind of matches in it, and so on.

In taking the hat from the person holding it, the performer tilts it a little, so that the collected articles shall run down to one side of the crown. He then brings it again to the perpendicular, and inserting his right hand, containing the palmed articles, brings out some object apparently haphazard. As a matter of fact, however, the object he takes out is the prearranged first article of the handful just inserted, the rest being left behind in the hat. He enquires what this article is, asking further questions as to any special marks or peculiarities about it, and now and then allowing the description to be verified, in a casual sort of way, by the spectator nearest to him. Occasionally, by way of variety, he allows the medium to volunteer the further information; of course with the usual elaborate pretence of "seeing" the article. When he reaches, say, the last two items on his prearranged list, he hears, or pretends to hear, a remark to the effect that he communicates the answer by the form of the question. Professing to feel somewhat hurt that such a thing should be thought possible, he hands the next article to one of the spectators and asks him to put the question himself, in any way he pleases; or still further to negative the idea of a cue, he says: "This time no question shall be, asked at all. Just clap your hands when you would like the medium to describe the article, and he will do so." Which he does accordingly.

THE POCKET-PICKING TRICK

This very effective trick, which consists in producing chosen cards from the shuffled pack, placed in performer's pocket, was an especial favourite with Hartz. His version was undoubtedly original so far as he was concerned, though a similar trick has been exhibited by other performers, who may have equal claim to the credit of having invented or reinvented it. In effect, it has some resemblance to Robert-Houdin's Clairvoyance du Toucher, a modification of which was worked with great success by the late Alexander Herrmann, under the name of The Egyptian Pocket. The modus operandi, however, is wholly different. To enable the reader to appreciate the differences between the two tricks, it may be convenient first briefly to recapitulate the effect of Robert-Houdin's version.

A spectator is invited to select a card. This (freely chosen) is replaced in the pack, brought to the top by the pass, palmed off, and the pack handed to be shuffled. The card is then replaced on the top, the performer having in the meantime "got sight" of it.

A spectator is invited to come upon the stage, and to empty his breast-pocket, in which the cards are then placed, backs outwards. The performer makes a little oration as to the delicacy, in certain cases, of the sense of touch, and the extent to which it may be cultivated. As an illustration, he undertakes, by touch only, to discover the drawn card. To make the experiment more striking, he will produce it at any number the drawer pleases. "Seventh," we will suppose, is the number selected. He accordingly takes out six indifferent cards, one after another (these being drawn from the bottom of the pack). Before producing the drawn card, he says, he will endeavour, with the aid of his little finger, which is the most sensitive of the five, to discover its nature. He once more places his hand in the pocket, and after feeling about therein; announces that the card is, say, the nine of diamonds, or as the case may be. The drawer admitting that he has named it correctly, he then brings out the top card, which is seen to be the right one.

Alexander Herrmann developed the trick in a new direction, characteristic of his splendid audacity. Having secured the aid of a spectator, he had four cards freely drawn. His volunteer assistant was instructed to collect them, faces down, on the palm of his hand. He was then asked to put them in the middle of the pack (which the performer divided in half to enable him to do so); to take the pack in his own hands, and shuffle thoroughly. Meanwhile; however, the four cards had been passed to the top, and palmed off. After the shuffle they were replaced in the same order, on the top. The pack was then placed, as in Robert-Houdin's version, in the breast-pocket of the volunteer assistant. Herrmann, who had taken careful note of the order in which the cards had been replaced by the four drawers, asked the person whose card was last returned (and was therefore outermost) to name his or her card. The answer was, we will suppose, the king of hearts. The performer then said to the assistant: "Now, sir, touch the end of my wand, and before the influence has time to evaporate, put your hand in your pocket, and take out the king of hearts." The assistant, thus urged to haste, naturally took the card which first offered itself, namely, the top or outermost card, which, of course, proved to be the right one. The process was repeated with the other three cards.

If, by accident or with malicious intention, the assistant takes a card from the middle or bottom of the pack, the performer is not at all discomfited. "My dear sir," he says, "you were not half quick enough. You allowed the influence time to go off. You will never make a conjurer if you are not quicker in your movements than that. See! you must do like this." He touches the end of the wand, and plunging his own hand quickly in the pocket, produces the right card. After this mild rebuke, the volunteer assistant (even if he realises that the drawn cards are at the top) may usually be relied on, for his own credit's sake, to produce the right ones, as asked for, without further trouble.

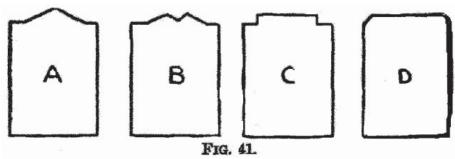
Hartz's pocket-picking trick, as will be seen, differed from either of these. The pack used was the piquet pack of thirty-two cards. This he handed to one of the company, with a request that he would take it into his own hands, pick out a card, and replace it just where he pleased. This was repeated till some half-dozen cards had been drawn and returned to the pack, the performer taking absolutely no part in the various operations. The person who last shuffled was invited to place the pack in the performer's breast-pocket, previously turned inside out and shown empty. After a few words of explanatory patter, as to being able to see with the tips of his fingers, or the like, he asked one of the drawers to name his card. "The nine of spades," we will suppose, was the reply. The performer dipped his hand into the pocket, and with scarcely a moment's hesitation, produced the nine of spades. The other cards drawn were named in turn, and produced in like manner.

The secret lay in the use of a second pack, specially prepared, and arranged in a card-case of peculiar construction. This consisted of four leather pockets, each the width of a card, or a little more, and in depth about half the length of a card. These were sewn together at bottom, like four leaves of a book. Each pocket contained one suit, the thickness of the leather keeping the four suits sufficiently apart to be readily distinguishable by feel. To render the individual cards of a suit more easily get-at-able, they were made to vary in length. The king alone was left intact. The queen was cut shorter, by, say, a sixteenth of an inch, the knave by two-sixteenths, the ten by three-sixteenths, the nine by half an inch, and so on. Each suit was placed in its appropriate pocket, the tallest card hindermost, and the other cards of the suit in front of it in due order, terminating with the ace.

The pack of cards thus arranged was at the outset vested, and was introduced by the performer into the pocket under cover of a few remarks interchanged with the gentleman who has placed the shuffled cards therein. He enquires, as seems reasonable enough, how the pack has been placed, whether on its side, or end up, and which way it faces, presently, with a perfectly natural gesture, putting his hand into the pocket, as if to make sure that all is as he would have it. Under. cover of so doing he leaves the prepared pack in the pocket and the trick is practically done. Knowing the order of the suits, and the position of each card in the suit it is an easy matter to pick out any one asked for.

The main points in which Hartz's method, as a described, differs from other current workings, are, first the gradation of the cards, which enabled the performer to produce them with ease and rapidity; and secondly the introduction of the faked pack after the genuine pack has been placed in the pocket. Most performers insert it beforehand, thereby weakening the effect of the trick in two particulars: viz., firstly, the pocket is not shown empty, and, secondly, the performer must himself place the shuffled pack in it, instead of proving (?) his good faith, by allowing it to be put in position by a spectator. These are but trifles, granted; but it is upon just such trifles that the magic of a conjuring trick depends.

I find among my memoranda a note of the same trick in effect, worked as far back as 1882. by a French performer named Simon, his method being I believe, his own invention. The thirty-two cards were arranged in regular order in four leather pockets, laid one against the other, but not



joined together. These were placed in the coat-pocket beforehand. To render the pockets more readily distinguishable, the upper end of each, at back, was shaped in a different manner, as represented by A, B, C, and D respectively in Fig. 41.

THE AERIAL WALKING-CANE

This is one of the numerous forms of the "suspension" trick. It was at one time a favourite with Hartz, but unlike most of his specialities, it was not of his own devising, the actual inventor being Professor Henri Herrmann, already mentioned (p. 68), who exhibited it with great effect as an item of his own programme when performing in conjunction with Dr Lynn at the Piccadilly Hall in 1877.

The performer brings forward a long, narrow, cloth-covered case, not unlike that used to contain a violin bow, and takes from it a polished ebony walking-stick, with ivory top and ferule. After this has been duly examined, he replaces it (under some pretext furnished by his patter) in the case, but

presently taking it out again, causes it to suspend itself, by virtue of some mysterious attraction, from his fingertips in various positions.

As the acute reader will doubtless have surmised, the object of keeping the stick in the case, and putting it therein again after examination, is to exchange it for another, specially prepared. This must be admitted to be a weak point. People don't usually keep walking sticks in cases, and in conjuring everything done without apparent motive is suspicious and therefore to be avoided. In the working of Messrs Herrmann and Hartz, however, the principal trick was prefaced by another, on somewhat similar lines, but dependent on wholly different means; the combination of the two neutralising to a considerable extent the weakness in question.

The two sticks used, though alike in their external appearance (which is as depicted in Fig. 42), differ widely in other particulars. Each is two feet nine inches long, and in greatest thickness five-eighths of an inch. The knob (if it can be so called, being actually cylindrical) is of ivory, and the ferule of the same material. Here, however, the resemblance ends. The body of the stick examined by the company is of solid ebony. The one with which the trick is actually worked is a tube of blackened *papier-maché*, weighing, inclusive of the ivory mounts, barely one and a half ounces. At a distance of not quite twelve inches from the upper end is a minute hole, from which protrudes a loop of fine but strong black hair, of such a size as to pass freely over the performer's hand, as far as the roots the fingers.

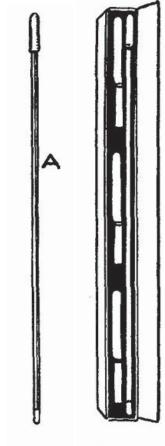
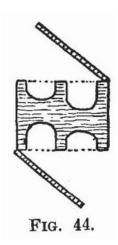


Fig. 42. Fig. 43.

The case used for changing the two sticks (Fig. 43) is about an inch longer than the sticks themselves. In width it is two inches, and in depth one and a half inches. It is reversible, having a lid both at top and bottom, but these are hinged to opposite sides, so that a cross-section of the empty box, if both sides were opened at once, would be as shown in Fig. 44, the deeper depression being for the accommodation of the stick, and the shallower for that of the knives to be presently mentioned. The

interior is filled up "solid," and lined with velvet, the depression or cavity next the hinge side, for the reception of the stick, occupying rather less than half the width of the case. In the other half are three shallower depressions, each containing an ordinary table-knife; the appearance of the whole, when the case is opened, being as in Fig. 43. Both sides are fitted in exactly the same way but in the one case (that of the side last opened) the three "knife" cavities are left empty.



The performer introduces the trick as an experiment in animal magnetism, designed to prove that the magnetic force is not confined to metallic objects. He is accustomed to use for the experiment, he says, a walking-stick which is an heirloom in his family, having been handed down from his great-great-great-great-grandfather. It is valued so highly, as a family relic, that one of his ancestors, a few generations back, had a case made specially to keep it in. Here he opens the case and takes out the solid stick, which he hands for examination. On receiving it back, he rubs it with a silk handkerchief ("to develop the magnetic influence"). Just, however, as he is about to show the promised experiment, he bethinks himself that it may be better, by way of introduction, to exhibit the same effect in another shape, using instead of the stick the three knives which are also seen in the case.

He therefore replaces the stick, for the moment, in its bed, and taking out the three knives, offers these also for inspection. When they are returned he lays them on the same table (a small one) on which the case is resting, and, professedly to gain more room, shifts the latter to another table, whereon a sheet of white paper is laid. The ostensible reason for this is to "insulate" the stick and prevent the escape of the magnetic influence, but its real purpose is to make it easier for the performer to see the hair-loop, which, unless against a white background, is practically invisible.

During this transfer from the one table to the other, the performer turns the box the other way up, this slight movement being quite imperceptible. Then, taking one of the knives in the left hand, he draws the fingers of the right hand along the blade two or three times, after which, laying the fingers of this hand on the blade, he proceeds to wave the knife about in various directions.

The secret here lies in the manner of placing the fingers. The first joints of the middle and third fingers are laid flat on the blade, while the tips of the first and fourth, resting against the edge (which for obvious reasons should not be too sharp), press it outwards. This pressure in opposite directions, slight as it is, supplies the needful amount of support.

After waving about the knife in various directions, the operator transfers it to the opposite hand, but in this case lays it across the second joints of the fingers. In this case the suspension is effected by another method, for which a little preliminary preparation is necessary. On the left side of the performer's vest, just below the armhole, is sewn a button. To this is attached, by a loop of thin cord, an elastic pull, consisting of four thin strands of raw rubber, about three inches in length, laid parallel, and joined together at the ends.

It may be here noted that where free extension of rubber is desired, combined with a fairly strong pull and a quick return, several weak strands, acting in concert, will be found much more effective than a single larger one.

At the opposite ends of the rubbers is another short loop of cord, to which is attached a longer loop (about seven inches) of unbleached flax thread. The length of the whole should be, approximately, about twenty inches. The precise measurement most suitable must be ascertained by personal experiment, as it will vary according to the length of the performer's arm, and the exact amount of tension desired.

When required for use, this appliance is drawn down the sleeve into the left hand, and the loop of thread secured by being brought under the nail of the outstretched middle finger (the nail being kept somewhat long for that purpose). In this condition the rubber should exercise a fairly strong, but not excessive tension, so as to hold the thread taut to the hand.

Thus prepared, the performer comes forward to show the trick. Having duly exhibited the knife at the fingertips of the right hand as already described, he transfers it to the left hand, passing the blade between the fingers and the extended thread. The pressure of the thread holds it close to the hand, and the operator can wave it about in various directions, only taking care that the spectators shall not get sight of the inside of the hand. After a little of this, he takes the two remaining knives and inserts their blades, one on each side, at right angles to each other, under that of the one already in the hand, when all three remain suspended. Presently he advances to a spectator, and invites him to take the three knives from the hand. The moment this is done, he bends the fingers. The loop, thereby released from the nail, flies up the sleeve, and no trace is left of the means whereby the suspension was effected.

Having completed the display with the knives, the performer once more takes the stick out of its case.

This time, however, the case having been reversed, it is the *papier-maché* stick which he takes out. He lays it down on the white paper while he shows his hands free from preparation. He then picks it up, again, and draws the fingers along from end to end two or three times, professedly "magnetising" it. In so doing he gets the forefinger of the right hand within the hair-loop, after which the other three fingers are introduced in succession. When all four are within, he gradually works the hand forward till the loop lies across the roots of the fingers, the "knob" end of the stick pointing to the right, nearest to the little finger. The thumb, which is left outside, rests upon the upper side of the stick, the wand appearing to adhere to the thumb and little finger.

After waving the stick about in various directions, he transfers it to the left hand, but in this case inserts the forefinger only within the loop. A pretty effect may now be obtained by letting the stick rest upon the thumb, apparently balanced upon it, though in reality suspended from the forefinger. A still more striking effect may be produced by holding the stick suspended in a nearly vertical position from the left forefinger, in the centre of a circle formed by the junction of the two thumbs and the two forefingers, so that it is in contact with neither, but hangs like Mahomet's coffin. Other effective positions will naturally suggest themselves to any expert making a study of the trick.

Combined after the above fashion, the two tricks form an effective complement, the one to the other. The pretended afterthought as to the knives supplies a colourable pretext for the return of the stick to the case. Further, the same effect (from the point of view of the ordinary spectator) is exhibited three times over, though it is each time produced in a different way. This is always a desideratum in conjuring; because, the theory which might explain one phase of the trick being obviously inadmissible in another, the true explanation remains, as Jeames de la Pluche would say, "wropt in mistry."

To obtain thoroughly satisfactory results, the stick should be so balanced that, when suspended from one finger, it should hang "knob" upwards, at an angle of about 45 degrees to the horizon. Its inclination will be mainly governed by the point at which the loop is fixed, but it is difficult to ascertain the right point with absolute certainty beforehand. There is pretty sure to be some slight deviation, but this is corrected in a very ingenious way. The ivory top and ferule are each hollow. If extra weight at either end is required, a little slip of paper is rolled up, and inserted at the appropriate end; even so minute a weight as this sufficing to give the stick a greater or less inclination.

It may be well to explain, in conclusion, the manner in which the hair-loop is attached to the stick. Each end of the hair, which is, approximately, about seven inches long, is attached to a tiny slab of rubber about a quarter of an inch square (cut from an ordinary elastic band). A threaded needle, broken off short at about one-third of an inch below the eye, is passed through the hole in the stick, and the thread paid out till it comes out at one of the open ends. The needle is then removed, and a little loop formed at the end of the thread. Through this loop the hair is passed to the extent of half its length, and the two ends laid side by side. The thread being then drawn back, brings the hair out through the hole. A single drop of thick gum, inserted in the opening, keeps all secure, and prevents the hair, by any accident, slipping back again.

THE EGG AND RINGS TRICK

The performer commences by borrowing three lady's rings. These he collects on a little stick, and thence pours them into a tumbler, which is handed to a spectator for safe-keeping. He next borrows a tall hat, but when about to place it on his table, notices that the owner has left something in it. This proves to be an egg, which is handed to another spectator. After turning up the lining of the hat, "that it may not get damaged," he leaves it on the table. Taking back the egg, he breaks it into a nickel-plated goblet, and beats it up with the stick on which the rings were collected. Then, advancing with both hands extended, but the one with the goblet the more advanced, he says to the person holding the rings: "Drop them in here." He naturally drops them into the goblet. The performer pretends that that was not what he meant, that he wanted them dropped, not into the cup, but into the disengaged hand. Finally, however, he says: "Well, it can't be helped. So much the worse for the hat! They have got to go in, anyhow."

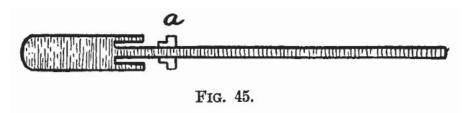
So saying, he pours the contents of the goblet into the hat, adding to the discomfort of the owner by passing his fingers round the inside edge of the cup; and apparently wiping them on the hat-lining. When he thinks he has sufficiently "piled on the agony," he discovers that things have turned out better than he had expected. Dipping his hand into the hat, he lifts out by a loop of ribbon a circlet of flowers, six inches in diameter, from which, on three swivel hooks, hang the borrowed rings. Below them in the centre, attached to another swivel, hangs a dome-topped cage containing a couple of living canaries, professedly the product of the egg. The rings are detached, and returned to the owners, the first two in the ordinary way. When, however, the performer is about to return the third, it somehow vanishes from his fingers, and finds its way into his pocket, from which it is in due course produced. This last is, of course, a mere effect of palming, in the apparent transfer from right hand to left, or vice versa.

In preparing for the trick, the egg to be produced is placed in the performer's right sleeve. The moment the arm is lowered it runs down into the hand, and is then introduced into the hat, though, according to his patter, the performer has discovered its presence there some moments earlier. The egg having been taken out, and handed to a spectator, the operator places the hat on his table, and under cover of the turn for that purpose loads into it the cage, taken from a pocket in the left breast of his coat.

The cage is constructed as follows: Each pair of wires is joined at bottom, being in fact a single wire bent into a long straight loop, like an exaggerated hair-pin, and having its ends attached, by small eyelets, to the upper part of the cage. The bottom, when the cage is expanded, rests upon the loop end (which is bent square) of each pair of wires, but can be moved up along them to within about two inches of the top. The wire may be then folded down upon the bottom, in which condition the cage occupies very little space. At its extreme top is a little cup, closed by a hinged lid, for the reception, at the proper time, of the beaten egg.

The flowers forming the wreath are artificial, and are wired on to a brass hoop, bearing the three swivels for the reception of the rings, and a fourth for the suspension of the cage. This hoop rests at the onset on the top of the cage. There is a piece of ribbon loosely crossing the hoop for the purpose of lifting it out of the hat. When this is done, the cage naturally follows, the bottom sinking by its own weight to its normal position, where it fixes itself by means of three little spring catches.

The stick on which the borrowed rings are collected, and which is afterwards used to beat up the egg, is of boxwood, ten inches in length, and in appearance not unlike the piston of a child's popgun. It is, however, not quite so innocent as it looks. A glance at the sectional view given in Fig. 45 will enable the reader to understand its construction. In the handle portion is excavated, round the

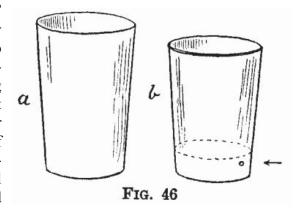


stick proper, a cavity deep enough to contain three finger-rings. In this space are beforehand placed three dummy rings, threaded one after another upon the stick, the cavity being then closed by passing over the stick and pushing home the tubular plug a, which just fits the opening. The borrowed rings having been collected on this stick, the performer, with the forefinger and thumb of the hand which holds it, loosens the plug. The opposite hand then draws off the plug, and with it the borrowed rings, the substitutes taking their place upon the stick. It is therefore the dummies which are handed for safe-keeping, and are ultimately dropped into the beaten egg.

Meanwhile, the performer, under cover of turning up the leather lining of the hat, hooks the three borrowed rings upon the appropriate swivels. The trick is now practically done. All that the wizard has to do is to pour the egg and the dummy rings into the hat (really into the cup at top of bird-cage), lift out the cage, and return the rings.

The palming and production from the pocket of the last ring are, of course, optional, but they bring the trick to an effective conclusion.

In connection with the subject of "egg and hat" tricks, I may mention a special goblet occasionally used by Hartz in tricks of this class, as it differs to some extent from most others used for the same purpose. This is a handsome nickel-plated cup standing four and a half inches high, as a in Fig. 46. In reality it consists of two, portions, the outer cup a, and an inner one, b. This latter is externally only three-eighths of an inch shorter than a, but its internal depth is three-quarters of an inch less than the external, its actual bottom being in the position indicated by the dotted line. At the point d is a small air-hole.



In use, the portion a is loaded into the hat (either separately, or by openly introducing both a and b together, and bringing out again b only). The egg, beaten up in b, is poured into the hat, or in reality into a, into which b is then lowered, after which both are brought up together, as one, the vent at d allowing the air to escape, and so permitting the one to be fitted closely into the other.

There is a wire edge round the mouth of the smaller cup, to facilitate the lifting out of the latter after the two together have been lowered into the hat.

CONTRIVANCES FOR "PASSING OFF"

One of the conjurer's most frequent requirements is to be able, unperceived, to "pass off" borrowed articles, handkerchiefs, watches, rings, and the like, to be dealt with, according to the nature of the trick in hand, behind the scenes. With a stage arranged after Robert-Houdin's fashion, this was a very easy matter. The stage was enclosed at each side as well as at the back, forming what in theatrical parlance is know as a "box" scene, and representing a drawing-room with white and gold furniture of the Louis XV. period. Fixed against the canvas wall on either side was an elegant little table of the "console" kind. In each of these tables was a trap, down which any article to be passed off might be dropped. The assistant, thrusting his arm into the interior of the table through an opening in the scene, took possession of the article, and disposed of it according to the needs of the case. But the Robert-Houdin arrangement is a thing of the past. The tendency of the present day is to work with as little stage furniture as possible, and it has been found necessary to devise other methods of passing off, to meet the altered conditions of modern conjuring. Here again Hartz comes to the fore with a couple of clever and little-known contrivances.



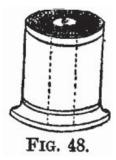
FIG. 47.

The first (Fig. 47) is a clear glass bottle, as used for claret, from one side of which has been cut out a piece oval in shape, and measuring about three inches by two. Within, the opening is fixed a sort of tin cup, forming a dry chamber within the body of the bottle, but not interfering, save to a very small extent, with its capacity for holding liquid. In the bottom of this cavity is placed a little cotton wool to prevent the rattling of anything placed inside.

The performer desires to pass off, say, a borrowed watch, of which he has secretly gained possession after one or other of the methods familiar to conjurers. At the appropriate moment (feeling a little faint, or for other good and sufficient reason), he asks his assistant to bring him a glass of wine. A glass and the bottle are brought in on a tray, the opening in the latter, of course, turned away from the audience. The performer helps himself, and replaces the bottle, which is then carried away again, the audience little suspecting that in the act of pouring out the wine the performer deposited

in the cavity the borrowed article, a substitute having been previously left in sight, or in the keeping of one of the spectators.

The second contrivance, suitable for smaller articles such as coins or rings, takes the form of a matchbox, or match-holder, of the kind in which the matches are inserted upright. (See Fig. 48.) The performer, wishing to pass off, we will suppose, a borrowed ring, under some pretext calls for a light, say in order to seal up a packet professedly containing the borrowed article. The assistant

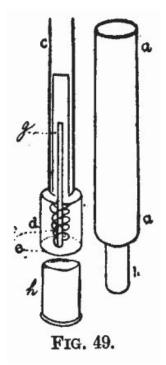


brings on, in one hand, a candle, and on the palm of the other the box of matches, examination of the latter, if permitted, would reveal the fact that it has a tubular opening, as indicated by the dotted lines in the diagram, right down the centre of the matches standing on end between this and the outer portion. In the act of taking a match, the performer drops the ring down the central space into the assistant's hand. This done, the matchbox is placed upon the table, and remains there till the trick is concluded, the assistant meanwhile walking off with the borrowed article.

Another of Hartz's earlier inventions was an ingeniously contrived pistol for passing off borrowed rings. It was, however, a little too suggestive of being made specially for conjuring purposes, and this was probably the reason that the inventor, in later performances, discarded it in favour of one or other of the more subtle expedients just referred to. For the sake of completeness, however, it may be worth while to describe it.

To an ordinary pocket-pistol is adapted a cylindrical brass tube, as a a in Fig. 49, about two inches in diameter, but shouldered off into a neck of smaller dimensions, b, at the end which fits over the pistol. So large a barrel naturally demands a special ramrod. The stem, c, of this is of wood, but the head, d, which is two inches deep, is of metal, cylindrical in form, and of such diameter as to pass easily down the barrel. Its lower edge is slightly turned in all round.

Resting on this turned edge is a loose bottom, e, normally pressed downward by a spiral spring, f, above it (kept in position by a central pin, g), but yielding easily to upward pressure. With this is used a brass cup, h, in general appearance exactly like the head of the ramrod, but of such a size as to fit somewhat tightly within it.



When it is desired to use the pistol, the barrel proper is loaded, in the ordinary way, with a light charge of powder, and the tube a a is placed in position. Into this the cup h is then privately inserted,

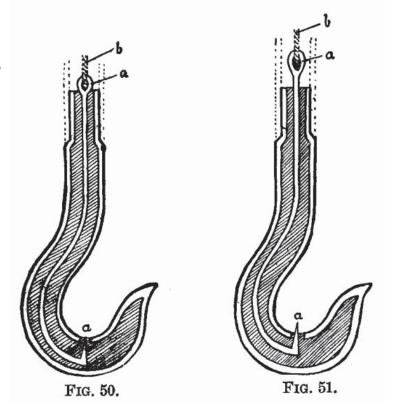
the performer taking due care that the pistol shall thenceforth be held muzzle uppermost. The borrowed rings are at the proper time dropped into the tube, naturally falling into h. The act of ramming down forces d over h, the loose bottom e receding to make way for the rings. When the ramrod is again withdrawn, and carried off by the assistant, the rings are carried off within it, and are at his disposal for the purpose of the trick.

THE HARTZ "HOOK," FOR WORKING MECHANICAL PIECES OF APPARATUS

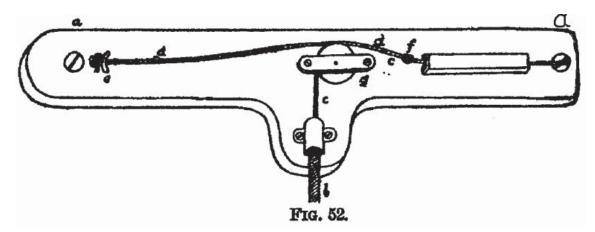
In the early Victorian period, when electricity was an unfamiliar force, it was naturally to be expected that the mystic fluid, about which the average man knew so little, should be pressed into the service of magic. Robert-Houdin led the way, and Hartz was not slow to follow. But electricity is a tricksy sprite. The current fails, or a connection breaks down at a critical moment, and the unhappy wizard who has put his faith in it is covered with shame and confusion. After considerable experience of its vagaries, Hartz determined to seek some more trustworthy handmaid, and the result was the invention of the mechanical hook, to be presently described. By the aid of this ingenious appliance he was enabled to work, with ease and certainty, the familiar but always effective Crystal Cashbox and Magic Bell of Robert-Houdin, which had previously been unworkable without the aid of electricity, and in addition a brilliant trick of his own, wherein a living bird was apparently materialized from nothingness in a suspended bird-cage.

The apparatus, in outward appearance, consists merely of a piece of blind cord hanging down in the centre of the stage just within the proscenium, with a brass hook on its lower end. It is not, however,

quite so simple as it looks, as will be perceived on inspection of Figs. 50 and 51, in which the hook is shown in section, actual size. It is in fact a piece of brass tubing, bent and finished off to the required shape. At the lowest point of its inner curve is a hole through which comes the point of an inner and smaller hook a a, the other end of which is connected with a silk line b, passing up the supposed blind—cord. This latter is in reality a flexible tube of fine brass wire coiled spirally, and covered with wool or silk in such manner as to give it the appearance of a cord. The upper end of the hook is reduced in diameter, as shown, to allow of the end of this tube being passed over it. When the inner line is slack, the hook is in the condition shown in Fig. 50, but when it is drawn taut, the point of the inner hook is raised as in Fig. 51.

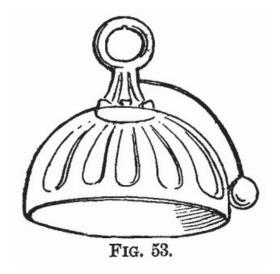


The upper end of the supposed cord is out of sight, but if the spectator were permitted to follow it to the point of attachment, he would find the arrangement depicted in Fig. 52. Here a a represents a brass plate six inches in length, screwed to the inside of the proscenium. b is the upper end of the supposed blind-cord, and c c c the line passing through it, and led away to the hand of the assistant



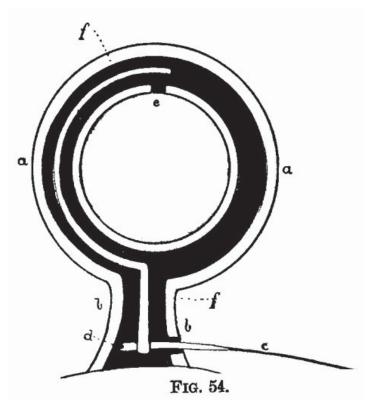
behind the scene. d d is a short piece of rubber cord, one end of which is attached to a staple at e, and the other led towards the cord c, to which it is attached by a knot at the point f, a little beyond the guide-pulley g. This rubber cord acts as a check, and prevents the silk line being pulled so far as to lift the cord b with it. It also ensures the return of c c c, and the consequent withdrawal of the hook a to the position shown in Fig. 50, the moment the pull is relaxed.

Each of the pieces of apparatus worked by means of this device is suspended by a ring hung on the hook, the mechanism of such ring being the complement of that of the hook. Fig. 53 gives a view of the Magic Bell, as adapted to this method of working. The bell itself is of clear glass, the fittings be-



ing of metal. It will be observed that the hammer lies on the outside. To make the bell therefore sound, the hammer must be lifted, and fall again. Fig. 54 shows how this is effected. The ring a a is hollow, as is also the shank b b. The wire stem c, which carries the hammer, forms the longer arm of a lever which works on a pivot at d, and whose opposite arm terminates just over a slot cut crossways in the ring at e. For greater clearness, this lever is shown in the diagram midway between its

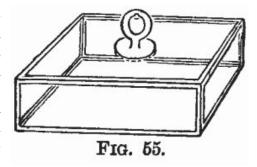
two alternative positions, but, as a matter of fact, its shorter end normally lies close to the inner surface of the ring, in actual contact with the opening e. When the shorter arm of the lever is in this position, the stem o is likewise depressed, and the hammer lies in contact with the bell. But if the bell be now suspended on the hook, and the thread pulled, the pin, on rising out of the hook, compels a corresponding elevation of the lever c. The hammer is thereby lifted, and when the pull is again relaxed, it falls and strikes the bell. This may be repeated ad libitum, each pull causing a separate stroke. By arranging the pulls accordingly, the bell may be made to count up to any given number, or answer questions after the spiritualistic fashion, with "three" for "yes," "one" for "no," and "two" for "doubtful," or as may be arranged.



When showing the bell round for inspection, the performer naturally inserts his finger in the suspending ring, thereby concealing the fact that there is a slot cut in it.

It may be here mentioned that after working the bell after the manner above described, Hartz was accustomed to take it off the suspended hook and to transfer it to another hook, forming part of a light brass stand, placed upon the "run-down," where it was still made to sound as before, this variation of the conditions of the trick producing a new element of mystery. The hook in this case was on the same principle as that just described, but was worked by electricity, the general arrangement being the same as described in the case of Hartz's Glove and Rings trick, of which particulars will be found at page 215.

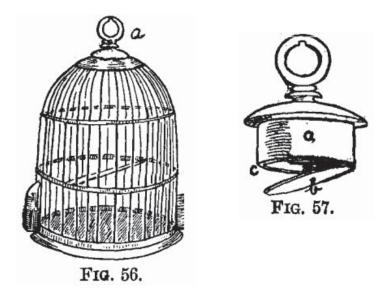
The non-electrical working of the Crystal Cashbox was effected in a very similar manner. The box was of bevelled plate-glass, set in a metal frame, and was about nine inches in length, six in breadth, and four in depth. It was suspended by a single ring in the centre of the lid, a, shown in Fig. 55. This ring was attached to a circular plate, about an inch and a half in diameter. On opening the box a similar plate was seen on the inner side of the lid. Between the two plates was a circular cavity cut through the whole thickness of the glass,



forming a receptacle to hold four half-crowns. The inner plate was in truth a movable flap working on a spring hinge just strong enough to make it self-closing. The flap, when the coins intended to appear in the box had been inserted in the cavity, was secured by a tiny catch, withdrawable by the same kind of mechanism in the ring as has been already described in the case of the bell.

The course of the trick will now be fairly obvious. The cashbox being suspended on the hook, and set swinging, the performer at the right moment makes the motion of passing four half-crowns from his hand into it. The line being at the same moment pulled, the concealed substitutes fall into the box, the coins professedly thrown from the hand being vanished by means of the tourniquet, or otherwise as may best suit the performer. The spring-flap closes again of its own accord. The coins taken from the box are, of course, exchanged for the originals (borrowed coins, duly marked) before they are handed back for identification.

The special bird-cage trick I have referred to is in effect as follows: A handsome cage of brass wire, circular, with dome top as in Fig. 56 (the familiar pattern of a canary bird's cage), has remained in full view, on the floor at the back of the stage, from the commencement of the performance. The performer borrows a ring, which is loaded into a pistol. He then fetches the cage from the back, and suspends it from the hook, hanging, as usual, from the centre of the proscenium. The cage is obviously empty, nor, apparently, is there the smallest space wherein anything could be concealed; and yet, when the pistol is fired at the cage, a canary appears therein. Still more surprising, round the bird's neck is a ribbon, bearing the borrowed ring.



The secret lies mainly in the construction of the cage. The ring at top, by which it is suspended, rises from the centre of a circular plate, three and a half inches in diameter. Immediately below this (see Fig. 57) is a cylindrical box a, three inches in diameter by one inch deep. This, like the coin-cavity in the cash-box, is closed by a flap b, working on a spring hinge, just strong enough to keep it closed when empty, but yielding to the slightest pressure upon it. There is, however, a spring catch at c, which keeps b securely closed till such catch is withdrawn, for which purpose the ring at top contains similar mechanism to that described in the case of the bell and cashbox. The "top" fits into a circular space in the upper part of the bird-cage, and when dropped into position fixes itself securely by means of a self—acting catch on each side.

Used with this is a duplicate "top," of precisely similar appearance, but having no mechanism whatever, and having no means of attachment to the cage, so that it simply lifts in and out of the circular space above mentioned, fitting quite loosely therein. When the cage is first seen at the back of

the stage it is this dummy top which is in position. The other, which we will call the "trick" top, is behind the scenes.

It should be here explained that when Hartz, in his earlier days was working a miscellaneous programme, he adopted to some extent a similar stage arrangement to that of Robert-Houdin, though greatly simplified. In particular, he had a small table placed against the side-scene. The end of this table farthest away from the spectators was open, and was so arranged as to form a small servante. Here the assistant was able, from behind the side-scene, to place any article of which it was necessary that the performer should gain secret possession.

This arrangement is utilised for the purpose of the bird-cage trick. After the borrowed ring has been "passed off" by one or other of the means already described, the assistant attaches it to the neck of a canary, and inserts the bird in the trick top of the bird-cage. This is then secretly placed on the servante above mentioned. The performer, making some excuse to go to the side-table, gets possession of this, and palms it. He then proceeds to fetch the bird-cage from its resting-place at the back of the stage, and while stooping to pick it up, under cover of his own body removes the dummy top, and substitutes the faked top, which, as before mentioned, fixes itself. The trick is now done. He hangs the cage on the hook, and fires the pistol at it. The assistant at the same moment pulls the line. The catch is withdrawn, the flap b opens, the bird falls out by its own weight, and instinctively drops on the perch, while b closes again by the action of the spring.

THE MYSTIC GLOVE AND RINGS

This is essentially an apparatus trick, and only adapted for the stage. The principal item is a hollow glass column on a heavy metal foot, and standing about two and a half feet high. This is surmounted by a cylindrical metal cup measuring, say, three inches across by two deep.

Briefly stated, the effect of the trick is as follows:- Four rings are borrowed from different spectators and placed in a pistol. A white glove, sometimes borrowed, sometimes the performer's own, is used as a wad. The column above mentioned is then brought forward and placed on a table. The performer fires at it. At the moment of the discharge the glove springs up, as if distended by the sudden insertion of a spirit hand, and remains (for a short time) erect on the cup at the top of the column. On each of the fingers is seen one of the borrowed rings, which are then taken off and returned to their owners.

So much for the effect; now for the explanation. The rings borrowed are exchanged, and the originals passed off, by one or other of the methods already described. The substitutes are placed in the pistol, and the originals passed off behind the scenes, where the performer's assistant places them in the cup at the top of the column. Fixed vertically within the cup is a short piece of brass tubing, about two inches in diameter and one and a half inches deep. A white glove is beforehand drawn over this tube as far as the palm and secured in that position by a strong rubber ring passed over it. The assistant places one of the borrowed rings, on each finger of this glove, then folding down the fingers loosely into the cup.

When the column is brought forward, it is placed over a hole in a table, standing with its back against the side-scene. This hole forms the outlet of a rubber tube, which passes through the table to the retreat of the assistant behind the scenes. At the moment when the pistol is fired the assistant blows vigorously through the tube, or in more modern times presses an air ball attached thereto. The rush of air expands the glove, which springs up like an opening hand, with a ring on each finger, as already described.

The working adopted by Hartz was in several particulars an improvement upon that of Robert-Houdin, as above described. The column in this case is of clear glass throughout, and is not brought on after the borrowing and passing off of the rings, but has been on the stage, in full view, from the commencement of the performance. In place of the metal cup, it is surmounted by a solid block of wood, of about the same size as the cup, but hexagonal in form, and connected with the top of the column by means of a cork plug, also solid, on its under side. In conjunction with the column is used a small round table, having a polished black-wood top, and placed at the outset near the centre of the stage.

Three rings only are borrowed. The performer states that he is about to fire them from a pistol, and asks the loan of a glove to be used as wad, but bethinking himself that the article may probably be damaged, ultimately decides to use one of his own. He tells his assistant to bring him a white glove

and a piece of paper, which are accordingly brought in on a tray. This is placed on the little table above referred to; the column as yet standing back on a larger table.

Taking the borrowed rings, the performer places them on three fingers of the glove, making as he does so a running commentary on their appearance, that they may be afterwards more readily recognised. Then, holding the glove by the fingertips, he brings it forward, and gets the owners to testify that the rings are really their own. Still holding the glove, fully displayed, in his left hand, he returns to the little table to get the piece of paper wherein to wrap it. During the transit he gets from under his vest into his right hand a little cylindrical package, about two inches in length by one in diameter, folded in similar paper. This he palms. On reaching the table he folds the glove, with the rings still on it, into a small compass, lays it on the piece of paper, and wraps this round it, rolling it into a cylindrical shape on his knee. The ends of the roll are in the first instance left open. In folding them down he substitutes the dummy package, and lays this instead on the tray.

He next exhibits a pistol, already loaded with a very small charge of powder. In this he places the dummy packet, and asks some gentleman to ram it down.

Pretending to notice that the gentleman is nervous, he pours him out a glass of wine from a bottle brought in at his request by the assistant, being, in fact, the trick bottle described at p. 203. Under cover of so doing, he drops the genuine packet into the cavity in the bottle, which is then carried off again. Laying aside, the pistol for a moment, he now brings forward the glass column. Removing the block of wood at top, he hands this first to be examined, leaving it, as being comparatively unimportant, in the hands of the holder while he himself passes on to exhibit the column itself to other spectators.

Meanwhile, the assistant has in readiness behind the scenes another block, of similar appearance to that offered for examination, but of much more elaborate construction representing, in fact, the "cup" of the earlier version of the trick. Though solid in appearance, it is in reality hollow, the top being closed by a miniature replica of what, in a stage parlance, is called a "star" trap, as shown in plan in Fig. 58. The top is divided into six triangular segments, meeting in the centre. Each of these is hinged to one of the upper edges of the hexagon so as to work in an upward direction with the ut-



most freedom. Within the block is a shallow brass cylinder, to which is secured, by means of a metal ring fitting closely over it, a white glove. As in the case of the solid block, there is a cork plug on the under side, but in this instance a piece has been punched out of its centre, so as to allow the passage of air. The moment the assistant has carried off the bottle, he extracts the little packet, takes out the rings, and places them on three of the fingers of the prepared glove. Closing the trap, and making all

snug again, he returns to the stage and stands in a waiting attitude. The performer, still occupied in offering the column for inspection, tells him to take the block from the gentleman who is holding it, and put it on the table. This he does, or appears to do, in reality substituting the prepared block, which the performer presently places in position on the top of the column, this latter being then placed on the little table, and the table on the end of the "run-down" farthest from the stage.

The table itself now demands a word of explanation. It stands on a central leg, branching into three carved feet. The leg is hollow, a plain brass tube extending from top to bottom, and communicating with a little hole bored in the centre of the table-top. In the tube is a piston, working easily, and normally forced upwards nearly to the top by means of a candle-spring, but capable of being pressed downwards by means of a rod inserted from above, and in that position held down by means of a spring catch; such catch, however, being withdrawable by the action of an electric current. From the catch, wires pass down two of the feet, terminating in sharp metal points, projecting from the under side of each.

Passing along the run-down, underneath the carpet, are two strips of brass, which are connected with an electric battery behind the scenes. So long as the two points above mentioned rest anywhere on the brass strips, they are also in electric connection with the battery. When the pistol is presently fired at the column, the assistant presses a stud which completes the circuit. The catch is withdrawn, and the piston flies upwards. The column of air above it is forced up the glass pillar. The glove is distended and flies up into view, the segments of the trap making way for it. Each of these describes a three-quarter circle and falls right over, hanging, when it comes to rest, against its own side of the block, which is so decorated that the altered condition of affairs shall make no difference in its appearance. It should be mentioned, by the way, that the foot of the column is flat on its under side, but has a cup-shaped cavity in the centre, which relieves the performer from the necessity of placing it exactly over the hole in the table.

The performer has only just time to remove the rings from the glove before it begins to sink down again, in consequence of leakage of air between the foot of the column and the table. The performer calls attention to this sinking, as proving that the sudden expansion of the glove was really magical, and not produced by any mechanical means.

L'ENVOI

With this item I bring these Recollections of Hartz to a close. My only regret is that they are not more complete, as they would certainly have been had I anticipated that my rough notes of conversations with my old friend were destined, many years later, to be expanded into articles for print. Imperfect as they may be, however, I may claim to have placed on record a good many items of substantial interest to every true lover of magic, and I am pleased to think that I have thereby raised a modest cairn to the memory of one who, in spite of his admitted deficiencies as a showman, was still, in my humble opinion, one of the greatest of Modern Magicians.

LOUIS HOFFMANN.

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