

NEW AND IMPROVED SERIES.

No. 20.

THE
MAGIC ORACLE,

Or Conjuror's Guide;

CONTAINING

THE WHOLE ART OF LEGERDEMAIN,

THE BEST AND NEWEST

TRICKS WITH CARDS, DICE, &c.

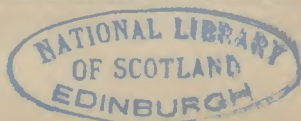
AND

DIRECTIONS FOR MAKING FIREWORKS.



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Price One Penny.



NEW AND IMPROVED METHOD

NO. 20.

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MAGIC ORACLE.

THE CONJURER'S SECRETS,

CONTAINING

THE WHOLE ART OF ESPYMERISM.

THE BEST FOR PRACTICE

TOGETHER WITH OTHER USEFUL

AND

ESPECIALLY FOR THE USE OF THE

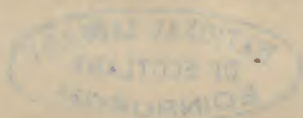


BY A. B. B. B.

PRINTED FOR THE PROPRIETOR

1800.

Price One Shilling



THE MAGIC ORACLE.

LEGERDEMAIN.

TO CHANGE BIRD-SEED INTO A LIVING BIRD.

GET a box made with a false lid, on which glue some bird-seed; privately put a bird into it, under the false lid; then show it, and it will seem to be full of seed. Put on the true lid, and say,—“I will command all the seed out of this box, and order a living bird to appear.” Then take off the covers together, and the bird will be seen.

TO MAKE AN EGG TUMBLE.

Put a pennyworth of quicksilver into a quill, and seal it at both ends with wax; then boil an egg hard, and as soon as you take it out of the water, put your quill through a small hole in the narrow end; put the egg on the table, and it will tumble about as long as the heat remains.

A CURIOUS METHOD OF RESTORING A FLY TO LIFE IN TWO MINUTES, THAT HAS BEEN DEAD TWENTY-FOUR HOURS.

This wonderful experiment is produced from a very simple cause. Take a fly, put it into a glass or cup of water, cover it so as to deprive it of air. When you perceive it to be quite motionless, take it out, and put it into a place exposed to the sun, and cover it with salt, in two minutes it will revive and fly away.

TO MAKE WATER FREEZE BY THE FIRESIDE.

This curious feat can only be performed in winter. Set a quart pot upon a stool before the fire, throwing a little water upon the stool first. Then put a handful of snow into the pot, having privately conveyed into it a handful of salt. Stir it about for eight or nine minutes with a short stick, and the congelation will be effected.

TO TAKE A BIRD OUT OF A CAGE, AND TO MAKE IT APPEAR AS IF IT WERE DEAD, OR TO ROLL IT ABOUT AS YOU PLEASE.

Lay the bird upon a table, and wave a small feather before its eyes, it will immediately seem as dead; remove the feather, and it will revive as soon. Let it lay hold of the stem part of the feather with its feet, and it will twist and turn about just like a parrot; you may then roll it about upon the table at your pleasure.

TO PURIFY BAD WATER.

Five drops of sulphuric acid put into a full quart decanter of bad water, will cause the noxious particles to fall to the bottom. Twenty drops of diluted vitriolic acid will answer the same purpose. The water should stand two hours, and then pour off about three parts for use; the rest throw away.

TO SUSPEND A QUART POT FROM THE CEILING, AND CUT THE STRING IN THE MIDDLE, WITHOUT THE MEASURE FALLING TO THE GROUND.

You must lay a wager upon this, and then tie the string in a loop about the centre. Having done this, cut the loop, and the quart pot will of course remain suspended.

TO GIVE EGGS A FINE VARIEGATED APPEARANCE.

Cut up about a couple of handfuls of different coloured rags into small strips, mix them together indiscriminately, and completely envelope the egg in them; then tie the whole up in a piece of cloth, and boil them for three or four hours. Take them up, and on uncovering the egg, the shell will be found dyed in a beautiful manner, with all the colours of the rags. Eggs thus variegated form very handsome ornaments for the mantel-piece.

TO CHALK A RING ROUND A PERSON THAT HE CANNOT GET OUT OF.

This trick, extremely simple as it is, causes much mirth in a party. Tell the company that you have the power to place any person in the middle of the room, and to chalk a ring round him that he cannot get out of, use as much labour and exertion as he may, without actually undressing himself. This will naturally cause much wonder, some one of the party will, doubtless, put your powers to the proof. Make such party stand in the middle of the room, button his coat, then with a piece of chalk make a ring round his person upon his coat, which it is evident he cannot get out of without taking his coat off.

THE ENCHANTED COCK.

Bring a cock into a room with both your hands close to his wings, and hold them tight; put him on a table and point his beak down as straight as possible; then let any one draw a line, with a piece of chalk, directly from his beak, and all the noise you can possibly make will not disturb him for some time, from the seeming lethargy which that position you have laid him in has effected.

TO SUSPEND A RING BY A BURNT THREAD.

The thread having been previously soaked two or three times in common salt and water, tie it to a ring not larger than a wedding-ring. When you apply the flame of a candle to it, though the thread burn to ashes, it will yet sustain the ring.

A CONCEIT TO PRODUCE LAUGHTER.

Take a ball in each hand, and, stretching your hands as far apart as you can, bet with any one in the company that you shall make both balls come into either hand he pleases, without bringing your hands together; as it appears rather a difficult feat, your bet will be readily taken up. You then accomplish the feat and win the wager by simply laying the ball in the one hand on the mantel-piece or table, and, turning yourself half round, taking it up with the other.

THE TRAVELLING EGG.

Take a goose's egg, and, after opening and cleansing it, put a bat into the shell; glue it fast on the top, and the bat will cause the egg to move about in a manner that will excite much astonishment.

THE SIMPLE DECEPTION.

Stick a little wax upon your thumb, take a by-stander by the fingers, show him a sixpence, and tell him you will put the same into his hand; then ring it down hard with your waxed thumb, and, using many words, look him in the face; suddenly take away your thumb, and the coin will adhere to it; then close his hand, and it will seem to him that the sixpence remains; now tell him to open his hand, and if you perform the feat cleverly, to his great astonishment, he will find nothing in it.

TO PRODUCE A COLOUR WHICH SHALL APPEAR AND DIS-
APPEAR BY THE INFLUENCE OF THE ATMOSPHERE.

Put into a decanter some volatile spirit, in which copper filings have been dissolved, and it will produce a fine blue

tincture; if the bottle be stopped; the colour will immediately disappear, but when it is unstopped the colour soon returns. This experiment may be repeated frequently.

TO MAKE AN EXPLODING BUBBLE.

If you take up a small quantity of melted glass with a tube, (the bowl of a common tobacco pipe will do,) and let a drop fall into a vessel of water, it will chill and condense with a fine spiral tail, which being broken the whole substance will burst with a loud explosion, without injury either to the party that holds it, or to him who breaks it; but if the thick end be struck, even with a hammer, it will not break.

HOW TO LIFT UP A FLINT GLASS BOTTLE WITH A STRAW.

Take a straw which is not broken or bruised, and having bent one end of it into a sharp angle, put this curved end into the bottle, so that the bent part may rest against its side; you may then take the other end and lift up the bottle by it, without breaking the straw, and this will be the more readily accomplished as the angular part of the straw approaches nearer to that which comes out of the bottle.

TO MAKE A CONE OR PYRAMID MOVE UPON A TABLE WITHOUT SPRINGS OR ANY OTHER ARTIFICIAL MEANS.

Roll up a piece of paper or any other light substance, and put a lady beetle, or some such small insect privately under it; then, as the animal will naturally endeavour to free itself from its captivity, it will move the cone towards the edge of the table, and as soon as it comes there will immediately return for fear of falling; and by thus moving to and fro, will occasion much sport to those who are unacquainted with the cause.

TO MAKE A PEG THAT WILL EXACTLY FIT THREE DIFFERENT KINDS OF HOLES.

Let one of the holes be circular, another square, and the third oval, then it is evident that any cylindrical body of a proper size may be made to pass through the first hole perpendicularly, and if its length be just equal to its diameter, it may be passed horizontally through the second or square hole; also, if the breadth of the oval be made equal to the diameter of the base of the cylinder, and its longest diameter of any length whatever, the cylinder being put in obliquely, will fill it as exactly as any of the former.

THE MYSTERIOUS BOTTLE.

Pierce a few holes, with a glazier's diamond, in a common

black bottle; place it in a vase or jug of water, so that the neck is only above the surface, then with a funnel fill the bottle, and cork it well while it is in the jug or vase. Take it out, and, notwithstanding the holes in the bottom it will not leak; wipe it dry, and give it to some person to uncork. The moment the cork is drawn, to the party's astonishment, the water will begin to run out of the bottom of the bottle.

THE MAGIC SPOON.

Put four ounces of bismuth in a crucible, and when in a state of complete fusion, throw in two ounces and a half of lead, and one ounce and a half of tin; these metals will combine, and form an alloy fusible in boiling water. Mould the alloy into bars, and take them to a silversmith to be made into tea-spoons. Place one of them in a saucer, at a tea-table, and the person who uses it will be not a little astonished to find it melt away as soon as he puts it into the hot tea.

TO PUT A PENNY-PIECE UNDER A CANDLESTICK, AND TO WITHDRAW IT WITHOUT LIFTING IT UP.

This appears a wonderful trick, and yet it is one of the most simple, and never fails to raise a hearty laugh. Place a penny piece under a candlestick on the table, then bet any one of the party that you will take it from under it without lifting up the candlestick. Thinking it impossible, some will, no doubt, accept your wager; this being done, knock three times sharply under the table, saying, "Presto, fly, begone!" then tell your antagonist it is gone, and desire him to lift the candlestick to satisfy himself, this, of course, he will immediately do; then, on the instant he raises the candlestick, snatch up the penny piece. You will then win the wager, as you did not take up the candlestick.

TO MAKE A MAGIC PICTURE.

Take two level pieces of glass, plate glass is the best, about three inches long and four wide, exactly of the same size; lay one on the other, and leave a space between them by pasting a piece of card, or two or three small pieces of thick paper, at each corner. Join these glasses together at the edges by a composition of lime slaked by exposure to the air, and white of an egg. Cover all the edges of these glasses with parchment or bladder except at one end, which is to be left open to admit the following composition. Dissolve by a slow fire, six ounces of hog's lard, with half an ounce of white wax, to which you may add half an ounce of clear linseed oil. This must be

poured in in its liquid state, and before a fire, between the glasses, by the space left in the sides, and which you are then to close up. Wipe the glasses clean and hold them before the fire, to see that the composition will not run out at any part. Then fasten with gum a picture or print painted on very thin paper, with its face to one of the glasses, and if you like, you may fix the whole in a frame. While this mixture between the glasses is cold, the picture will be quite concealed, but become transparent when held to the fire, and as the composition cools it will gradually disappear.

TO MAKE A SHILLING TURN UPON ITS EDGE ON THE POINT OF
A NEEDLE.

Take a wine or porter bottle, and insert in the mouth a cork, with a needle in a perpendicular position. Then cut a nick in the face of another cork, in which fix a shilling, and into the same cork stick two common table forks, opposite to each other, with the handles inclining downwards; if the rim of the shilling be then placed upon the point of the needle, it may be turned round without any risk of falling off, as the centre of gravity is below the centre of gravitation.

THE TRANSPOSABLE PIECES.

Take two farthings and two sixpences, and grind part of them away on one side only, so that they may be but half the common thickness; and observe, that they must be quite thin at the edge; then rivet a farthing and a sixpence together. Lay one of these double pieces, with the sixpence upwards, on the palm of your hand, at the bottom of your three first fingers, and lay the other piece, with the farthing upwards, in the like manner, in the other hand. Let the company take notice in which hand is the farthing, and in which is the sixpence. Then, as you shut your hands, you naturally turn the piece over, and when you open them again, the farthing and the sixpence will appear to have changed their places.

A CANDLE CONVERTED INTO CARBURETTED HYDROGEN GAS.

When a candle is burned so low as to leave a tolerably large wick, blow it out; a dense smoke, which is a compound of hydrogen and carbon, will immediately arise; then, if another candle or lighted taper be applied to the utmost verge of this smoke, a very strange phenomenon will take place; the flame of the lighted candle will be conveyed to that just blown out, as if it were borne on a cloud, or, more properly speaking, like a flash of lightning proceeding at a slow rate.

TO PRODUCE AN ELECTRIC SPARK FROM A PIECE OF BROWN PAPER.

Thoroughly dry before the fire a quarter of a sheet of rather strong brown paper, place it on your thigh, holding it at the edge with one hand, while with the cuff of the sleeve of the other you rub it smartly back and forwards ten or fifteen times; if the knuckle be then placed near the paper it will emit a brilliant spark, accompanied with a snapping noise; the prongs of a fork similarly placed, will produce three distinct streams of light. The experiment must, of course, be performed in the dark, and the trousers and coat be of woollen cloth.

TO WALK UPON A HOT IRON BAR.

Take half an ounce of camphor, dissolve it in two ounces of aqua vitæ, add to it one of quicksilver, one ounce of liquid storax, which is the droppings of myrrh, and prevents the camphor from firing; take also two ounces of hematis, which is red stone, to be had at the druggists, and when you buy it let them beat it to a powder in their great mortar, for being very hard it cannot well be reduced in a small one; add this to the ingredients already specified, and when you purpose to walk upon the bar, anoint your feet well with it, and you may then put the feat into execution without the slightest danger.

TO MAKE AN EGG STAND ON ONE END ON A TABLE OR LOOKING-GLASS.

To make an egg stand on end on any polished surface seems very extraordinary, yet is to be done even on a looking-glass; now, from the form of an egg, nothing is more liable to roll, and on nothing more than a looking-glass. To accomplish this trick, let the performer take an egg in his hand, and while he keeps talking and staring in the faces of his audience, give it two or three hearty shakes, this will break the yoke, which will sink to one end, and consequently make it more heavy, by which when it is settled, you may make it, with a steady hand, stand upon the glass. This would be impossible while it continued in its proper state.

TO PLACE A LIGHTED CANDLE UNDER WATER, WITHOUT EXTINGUISHING IT; OR A HANDKERCHIEF, WITHOUT WETTING IT.

Take a glass, and fastening a small bit of wood across the mouth, stick thereupon a piece of candle lighted, and, with a steady hand, convey the glass to the surface of the water; then push it carefully down, and the candle may be seen

burning under the water, and it may be brought up again alight.

In the same manner you may put a handkerchief rolled tight together and it will not be wet. The principal art in performing this feat consists in the nicety of bringing the mouth of the glass exactly level with the surface of the water; for, if it be put the least on one side, the water will rush in, and consequently defeat the object.

The experiment, simple as it is, may serve in some degree to elucidate the principle of the *diving-bell*, as it is contrived much in the same way.

TO TELL A PERSON WHERE HE HAS DEPOSITED THE LAST OF
THE THREE GIVEN KNIVES.

In order to make this trick appear plausible, wager any sum with a person that you will give him three knives to hide (one at a time,) and you will tell him where he will deposit the last. It generally happens with the person who accepts of this wager, to make stipulations to hide them out of the room, which you readily agree to, and on your presenting to him, in a careless manner, the first and second knife, he runs out, and carefully deposits them in some secret hole or corner, though not the least consequence is attached to them in wording the wager.

During your opponent's absence backward and forward, whip the third knife into the fire, and by the time he is prepared to accept of it, have it moderately heated; he will then naturally enough deposit it on the ground, with a few ejaculations incident to a person in his situation, while you exclaim, "There, there it is, on the ground—I knew where you would deposit it. So I have won the wager."

TO MAKE A WATCH STOP AND GO AT THE WORD OF COM-
MAND.

Borrow a watch from any person in company, and request of the whole to stand around you. Hold the watch up to the ear of the first in the circle, and command it to go. Then demand his testimony to the fact. Remove it to the ear of the next, and enjoin it to stop. Make the same request of that person, and so on, throughout the entire party.

Explanation.—You must take care in borrowing the watch that it be a good one, and goes well; have concealed in your hand a piece of loadstone, which, as soon as you apply it to the watch, will occasion a suspension of its movements, which a subsequent shaking and withdrawing of the magnet will restore.

For the sake of shifting the watch from one hand to the other, apply it when in the right hand to the left ear of the person, and when in the left hand the right ear. But if you can slip the loadstone up and down your sleeve, by using one hand, the feat is more curious.

TO TELL THE NUMBER THOUGHT OF BY A PERSON.

Desire the person to take one from the number thought of, and to double the remainder, then bid him to take one from this double, and to add it to the number thought of; in the last place, ask him to tell you the number arising from this addition, add three to it, and the third of the sum will be the number required. For example—Let the number thought of be 6, if 1 be taken from it, there will remain 5, the double of which, 10, being diminished by 1, and the remainder 9 being increased by 6, the number thought of, the result will be 15, if to this we add 3, we shall have 18, the third part of which, 6, will be the number required.

TO TELL WHAT REMAINS AFTER WORKING A QUESTION IN ADDITION, SUBTRACTION, MULTIPLICATION, AND DIVISION, AND YOU NOT KNOWING ANY OF THE FIGURES BUT THOSE USED IN THE ADDITION.

Desire any person to think of a number; then ask him to double it; then name some number which he is to add to it; then ask him to take away half of the whole amount, and then deduct the figure first thought of, and the remainder will be just half the number you told him to add. For instance, let the figure thought of be 8, doubling it makes 16, adding six to it (as you tell him to do, and that is the only figure you know in the whole process of working the question,) gives 22; take away half, and 11 is left; from this deduct 8, the figure first thought of, and 3 remain—that is the half of the sum you ordered to be added.

TO MAKE A BALL OR LOAF OF BREAD DANCE UPON A TABLE.

Having a quill filled with quicksilver and stopped close, you secretly thrust it into a hot roll or loaf, which will put it in motion.

By means of quicksilver, many ludicrous feats may be performed.

An old lady on a Sunday was making dumplings, when two urchins, her grandsons, came to visit her, and being archly disposed, while her back was turned, conveyed some quick-

silver into the dough, and then took their departure. The ancient dame left the care of the cooking to her granddaughter, and betook herself to church, charging her to be careful in skimming the pot, wherein were contained the dumplings and a leg of mutton. The girl was very watchful to obey those injunctions, and taking off the cover, when the pot boiled, out popped a dumpling, which she put in again, when out bounced another, and another after that, so terrifying the girl that she ran with all her speed to the church. Grandmother seeing her come, shook her head, winked at her, as much as to say, "hegone!" At last the girl cried out before the whole congregation, "All your nodding and winking is in vain, for the leg of mutton has kicked the dumplings out of the pot."

Feats performed through the medium of quicksilver should be executed with the greatest caution, as there is some danger attending them.

TO CUT AND TEAR INTO PIECES A HANDKERCHIEF, AND TO MAKE IT WHOLE AGAIN.

This feat, strange as it appears, is very simple: the performer must have a confederate, who has two handkerchiefs of the same quality, and with the same mark, one of which he throws upon the stage to perform the feat with. The performer takes care to put this handkerchief uppermost in making up a bundle, though he affect to mix them together promiscuously. The person whom he desires to draw one of the handkerchiefs, naturally takes that which comes first to hand. He desires to shake them again to embellish the operation, but in so doing, takes care to bring the right handkerchief uppermost, and carefully fixes upon some simpleton to draw; and if he find that he is not likely to take the first that comes to hand, he prevents him from drawing by fixing upon another, under pretence of his having a more sagacious look. When the handkerchief is torn and carefully folded up, it is put under a glass upon a table placed near a partition. On that part of the table on which it is deposited is a little trap, which opens and lets it fall into a drawer. The confederate, concealed behind the curtain, passes his hand within the table, opens the trap and substitutes the second handkerchief instead of the first; then shuts the trap, which fits so exactly the hole it closes, as to deceive the eyes of the most incredulous. If the performer be not possessed of such a table, (which is absolutely necessary for other feats as well as this,) he must have the second handkerchief in his pocket, and by slight of hand change it for the pieces, which must be instantaneously concealed.

HOW TO TAKE THREE BALLS OFF TWO STRINGS.

While the balls are examining, you double each string, and each appears to have two even ends; you twist the double end of each together, and putting on one of the balls which has a hole smaller than the others over the place that is joined, the strings remain firm, and can bear to be pulled. Each person that holds, thinks he has the extremities of two strings, while in fact he has only the ends of one. By a jerk the middle ball comes off, followed by the rest; you then slip them into the hands of one of the persons who holds the strings; he of course lets go his hold, and you then take care to put the strings lengthways. This is a clever feat when performed adroitly, but it requires no slight degree of dexterity to conceal the deception. Formerly the feat was performed with three button moulds on two small whip cords of about two feet each, and with three rings upon two ribbons, but the balls and tapes are preferable.

MAGIC SQUARES.

A magic square consists of numbers so disposed that in whatever way you may add the numbers which the square contains, they will give the same amount, whether it be vertically, horizontally, or diagonally.

2	9	4
7	5	3
6	1	8

16	5	2	13
5	10	11	8
9	6	7	12
4	15	14	1

11	24	7	20	3
4	12	25	8	16
17	5	13	21	9
10	18	1	14	22
23	6	19	2	15

The first one hundred numbers so disposed as to produce 505 when added upwards or crossways.

10	92	93	7	5	96	4	98	99	1
11	189	18	84	85	86	87	13	12	97
71	29	28	77	76	75	24	23	22	80
70	62	63	37	36	35	34	68	69	31
41	52	53	44	46	45	47	58	59	60
51	42	43	54	56	55	57	49	49	50
40	32	33	67	65	66	64	38	39	61
30	79	78	27	26	25	74	73	72	21
81	89	83	14	15	16	17	83	82	20
100	9	8	94	95	6	97	3	2	91

THE MAGIC CARDS.

No. 1.

1	3	5	7
9	11	13	15
17	19	21	23
25	27	29	31
33	35	37	39
41	43	45	47
49	51	53	55
57	59	61	63

No. 2.

2	3	6	7
10	11	14	15
18	19	22	23
26	27	30	31
34	35	38	39
42	43	46	47
50	51	54	55
58	59	62	63

No. 3.

4	5	6	7
12	13	14	15
20	21	22	23
28	29	30	31
36	37	38	39
44	45	46	47
52	53	54	55
60	61	62	63

No. 4.

8	9	10	11
12	13	14	15
24	25	26	27
28	29	30	31
40	41	42	43
44	45	46	47
56	57	58	59
60	61	62	63

No. 5.

16	17	18	19
20	21	22	23
24	25	26	27
28	29	30	31
48	49	50	51
52	53	54	55
56	57	58	59
60	61	62	63

No. 6.

32	33	34	35
36	37	38	39
40	41	42	43
44	45	46	47
48	49	50	51
52	53	54	55
56	57	58	59
60	61	62	63

The best method of using the above is to cut away the leaf, and paste each of the six divisions on a separate slip of stiff card; present these cards to the person whose age you wish to tell, and desire him to return you all those on which his age is marked; add together the first figures of each card returned, and the amount will be the exact age of the person. Thus, if his age should be 27, he will return you Nos. 1, 2, 4, and 5, these being the only cards on which 27 is marked, and by adding the first figures of each of these together, viz., 1, 2, 8, and 16, you obtain 27—the age required.

THE MAGIC PAPER ORACLE.

Some amusement may be created among young people, by writing with common ink, a variety of questions, on different bits of paper, and adding a pertinent reply to each, written with nitro-muriate of gold. The collection is suffered to dry, and put aside till an opportunity offers for using them. When produced, the answers will be invisible; you desire different persons to select such questions as they may fancy, and take them home with them; you then promise, that if they are placed near the fire during the night, answers will appear beneath the questions in the morning; and such will be the fact, if the papers be put in any dry warm situation.

TRICKS WITH CARDS AND DICE.

TO TELL ANY CARD IN THE PACK.

This is an excellent trick, and though quite simple, will be found to astonish an audience in which it is not known. Seat yourself at table or elsewhere, so as to have the whole of the company as much as possible in front of you. Take the pack of cards as it usually lies, and, in passing it under the table or behind you, steal a glance at the card which happens to be exposed; then, pretending to shuffle the cards, place the one you have seen back to back on the other side of the pack, and holding the cards firmly by the edges, raise your hand between you and the company, and show the card you have seen, telling at the same time, what it is. While doing so, observe which card is facing you (for you have now the whole pack facing you except the one card which is shown to the spectators,) pass them under the table again, and transfer the card which you have just seen to the other side of the pack, handling the cards as if shuffling them; again exhibit, and cry out the name of the card turned to the company, taking care to notice the card that faces yourself, which, change as before, and so on, by which means you may go over the whole pack, telling each card as it is exposed, without ever looking at the cards, except when they are held up between you and your spectators, and when they are anxiously looking at them themselves to see whether you are right or not.

TO TELL A CARD THOUGHT OF BLINDFOLD.

Take twenty-one cards, and lay them down in three rows, with their faces upwards; *i. e.* when you have laid out three, begin again at the left hand, and lay one card upon the first,

and so on to the right hand; then begin on the left hand again, and so go on until you have laid out the twenty-one cards in three heaps, at the same time requesting any one to think of a card. When you have laid them out, ask him which heap his card is in: then lay that heap in the middle between the other two. This done lay them out again in three heaps as before, and again request him to notice where his noted card goes, and put that heap in the middle, as before. Then taking up the cards with their backs toward you, take off the uppermost card, and reckon it one; take off another, which reckon two; and thus proceed till you come to the eleventh, which will invariably prove to be the card thought of. You must never lay out your cards less than three times, but as often above that number as you please. This trick may be done without your seeing the cards at all, if you handle and count them carefully. To diversify the trick, you may use a different number of cards, but the number chosen must be divisible by three, and the middle card, after they have been thrice dealt as directed, will always be the one thought of; for instance, if done with fifteen cards, it must be the eighth, and so on; when the number is even, it must be the exact half; as, if it be twenty-four, the card thought of will be the twelfth, &c.

TO PICK OUT ALL THE COURT CARDS BLINDFOLD.

The following trick is one of the simplest when known, but creates more wonder in a private party during its operation than almost any in the whole catalogue.

Previous to your wishing to perform this trick, draw aside one of the party, and make him acquainted with the process of it. After mingling again with the company, and introducing a discourse about various tricks with cards, you may then profess to have the power of picking out all the court cards blindfold.

The process is thus:—After your eyes are tightly bound, and the company seem perfectly satisfied that they are so, take up the pack, and holding up one in view of the whole company, feel it about. Your confederate (whom you contrive to have seated next to you,) if a court card, must then tread on your toe, and you proclaim aloud, “Ah! this is a good one!” you then hold up another card, (feeling and smelling it all over,) and if it prove a common card, your confederate takes no notice of it; you then say, “No, this will not do—this is a bad one;” and so on, till you have convinced the company of your capability.

TO HOLD FOUR KNAVES OR FOUR KINGS IN YOUR HAND, AND TO CHANGE THEM SUDDENLY INTO BLANK CARDS, AND THEN INTO FOUR ACES.

You must have cards made for the purpose of this feat, half cards, as they may be properly termed, that is, one half kings or knaves, and the other half aces. When you lay the aces one over the other, nothing but the kings or knaves will be seen. Then turning the kings or knaves downwards, the four aces will be seen. You must have two perfect cards, one a king or knave, to cover one of the aces, or else it will be seen; and the other an ace to lay over the kings or knaves. When you wish to make them all blank cards, lay the cards a little lower, and by hiding the aces, they will all appear white on both sides. You may then ask the company which they choose, exhibit kings, aces, or blanks as required.

UPS AND DOWNS.

This is one of the most simple ways, but by no means the less excellent, of ascertaining what card a person chooses. When you are playing with the pack, drop out the diamonds, from the ace to the ten, and contrive without being perceived, to get all the other cards with their heads in the same direction; then request a person to choose a card; do not force one, but let him choose whichever he pleases: while he has it in his hand and is looking at it, carelessly turn the pack in your hand, so that the position of the cards may be reversed; then bid him put the card he has chosen into the centre of the pack; shuffle and cut them, and you may to a certainty know the card chosen, by its head being upside down, or in a different direction from the rest of the pack.

THE TURN-OVER.

When you have found a card chosen, which you have previously forced, or any card that has been drawn, and which you have discovered by the means before described, in order to finish your trick cleverly, convey the card, privately, to the top of the pack; get all the other cards even with each other, but let the edge of your top card project a little over the rest; hold them between your finger and thumb, about two feet from the table, let them drop, and the top card (which must be, as we have said, the one drawn,) will fall with its face uppermost, and all the rest with their faces toward the table.

CARDS IN COUPLES.

Select any twenty cards, and having them shuffled by any person that pleases, lay them in pairs upon the table, then desire

several persons (as many as there are pairs on the table) to look at different pairs, and remember what cards compose them. You then take up the cards in the order in which they have been placed, and replace them with their faces uppermost upon the table, according to the situation of the letters in the following word:—

M	U	T	U	S
1	2	3	4	5
D	E	D	I	T
6	7	8	9	10
N	O	M	E	N
11	12	13	14	15
C	O	C	I	S
16	17	18	19	20

These words, which have no particular meaning, contain ten letters repeated, or two of each sort. You, therefore, ask each person which row or rows the cards he looked at are in, if he says the first, they must be the second and fourth in that row; these being the only duplicates in them; if he says the second and fourth, they must be the ninth and nineteenth, and so of all the rest. This amusement, which is very simple, and requires very little practice, will excite considerable astonishment in the uninformed.

TO CALL ANY NUMBER OF CARDS FROM A PACK.

Take up a pack of cards, and carelessly notice the bottom card in the pack, then pretend to shuffle them well, but be careful to shuffle that particular card (say the ace of diamonds) always as the top card, then desire any of the party to cut them into three packs; when done, call for the ace of diamonds at any of the packs but the one which you know contains it at the top. Of course it will be quite a different card, (say the nine of clubs;) then call for that at the next, which will be different again, (say the jack of spades;) then call for it at the pack which you know contains the ace of diamonds, and you can then produce the whole of those called for. Be careful to throw them on the table in the order you called for them, and this will appear a fine trick.

THREE DICE BEING THROWN ON A TABLE, TO TELL THE NUMBER OF EACH OF THEM, AND THE ORDER IN WHICH THEY STAND.

Let the person who has thrown the dice double the number of that next to his left hand, and add five to that sum; then multiply that amount by five, and to the product add the number of the middle dice, then let the whole be multiplied

by ten, and to that product add the number of the third dice. From the total let there be subtracted 250, and the figures of the number that remain will answer to the points of the three dice, as they stand on the table

Example:—

Suppose the points of the three dice thrown on the table to be.....4, 6, 2.
Then the double of the first dice will be..... 8
To which add..... 5

13

5

That sum multiplied by five will be..... 65
To which add the number of the middle dice..... 6

71

And multiply the sum by..... 10

710

To that product add the number of the third dice..... 2

712

Subtract..... 250

462

The numbers of the dice and the order in which they stand.

ANY NUMBER OF DICE BEING GIVEN, TO DETERMINE WHAT DEGREE OF PROBABILITY THERE IS OF THROWING AN ASSIGNED NUMBER OF POINTS.

In the first place we shall suppose that the dice are of the ordinary kind, namely, having six faces marked with the numbers 1, 2, 3, 4, 5, 6; and we shall analyze some of the first cases of the problem, that we may proceed regularly to those that are more intricate.

I. It is proposed to throw a determinate point, 6 for instance with one die.

Here it is evident, that as the die has six faces, one of which is only marked six, and as any one of them may as readily come up as another, there are five chances against the person who wishes to throw a six at one throw, and only one in his favour.

II. Let it be proposed to throw the same point 6 with two dice.

To analyze this case, we must first observe that two dice give 36 different combinations, for each of the faces of the die A, for example, may be combined with each of those of the die B, which will produce 36 combinations. But 6 may be thrown first 3, and 3; second by 2, with the die A, and 4 with the die B, which, as may be readily seen, forms two distinct cases; third, by 1 with the die A, and 5 with the die B, or 1 with B and 5 with A, which also gives two cases; and these are all which are possible. Hence there are five favourable chances in 36; consequently, the probability of throwing six with two dies, is $5/36$, and that of not throwing it is $31/36$. This therefore ought to be the ratio of the stakes or money deposited by the players. But analyzing the other cases, it will be found that of throwing two with two dice, there is one chance in 36; of throwing 3, there are two; of throwing 4, three; of throwing 5, four; of throwing 6, 5; of throwing 7, six; of throwing 8, five; of throwing 9, four; of throwing 12, three. If three dice were proposed, with which it is evident the lowest point would be three, and the highest eighteen, it will be found, by a similar analysis, that in 216, the whole number of the throws possible with three dice, there is one chance of throwing 3; three of throwing 4; six of throwing 5, &c.

FIRE WORKS.

TO MAKE ARTIFICIAL FIRE BALLS.

Put thirty grains of phosphorus into a Florence flask, with three or four ounces of water. Place the vessel over a lamp, and give it a boiling heat. Balls of fire will soon be seen to issue from the water, after the manner of an artificial fire-work, attended with the most beautiful coruscations.

TO MAKE FIRE FLASH FROM WATER.

Pour a small quantity of clear water into a glass, and put a piece or two of phosphoret of lime into it. In a few seconds flashes of fire will dart from the surface of the water, and end in curls of smoke rising in regular succession.

TO MAKE LUMINOUS WRITING IN THE DARK.

Fix a small piece of solid phosphorus in a quill, and write with it upon paper; if the paper be then placed in a dark room, the writing will appear beautifully luminous.

THE FIERY FOUNTAIN.

If twenty grains of phosphorus, cut very small, and mixed with forty grains of powder of zinc, be put into four drachms of water, and two drachms of concentrated sulphuric acid be added thereto, bubbles of inflamed phosphoretted hydrogen gas will quickly cover the whole surface of the fluid in succession, forming a real fountain of fire.

TO CAUSE A BRILLIANT EXPLOSION UNDER WATER.

Drop a piece of phosphorus, the size of a pea, into a tumbler of hot water; and, from a bladder, furnished with a stop-cock, force a stream of oxygen directly upon it. This will afford a most brilliant combustion under water.

TO MAKE A PARTY APPEAR GHASTLY.

Take half a pint of spirits, and having warmed it, put a handful of salt with it into a basin, then set it on fire, and it will have the effect of making every person within its influence look hideous. This feat can only be performed in a room.

TO CAUSE A REPORT LIKE A GUN WITH A PIPE.

Previously to performing this feat, you must have a powder composed of the following ingredients in your pocket:—One ounce of saltpetre, one ounce of cream of tartar, and half an ounce of sulphur, pulverized singly, and then mixed together. Convey a single grain of this powder into a tobacco-pipe, and when it takes fire, it will produce a noise like that of a gun, without breaking the pipe.

TO MAKE DETONATING BALLS, &c.

Half a grain of fulminating silver is to be wrapped up with a hard pea, in a piece of tissue paper, this, when thrown smartly on the ground, or when trod upon, explodes with a loud report.

A very small quantity of the silver, enclosed in a piece of sandpaper, and placed under the foot of a chair, will explode when any one sits down on it. A little of it placed in the heel of a boot or shoe, with a piece of paper pasted over it, will explode on the heel being pressed to the ground. Placed in a snuffers, it will go off with a smart report when they receive the hot snuff of the candle.

TO MAKE CRACKERS.

Some stout cartridge paper must be cut into pieces three inches and a-half broad, and one foot long; one edge of each

of these pieces fold down lengthwise, rather less than an inch broad; fold the double edge down a quarter of an inch, and turn the single edge back half over the double fold; then open it, and lay all along the channel which is formed by the foldings of the paper, some meal powder; then fold it over and over till all the paper is doubled up, rubbing it down every turn; this done, bend it backwards and forwards, two inches and a-half or thereabouts at a time, as often as the paper will allow, then hold all these folds flat and close, and with a small pinching cord give one turn round the middle of the cracker, and pinch it close, then bind it with pack thread as tight as you can, then, in the place where it was pinched, prime one end, and cap it with touch paper. When these crackers are fired they will give a report at every turn of the paper.

TO MAKE WATERLOO CRACKERS.

Take a slip of cartridge paper, about three quarters of an inch in width, paste and double it, let it remain till dry, then cut it in two equal parts in length, (Nos. 1 and 2,) according to the following pattern:—

No. 1.	Glass	S	Glass		No. 2.
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Take some of the glass composition and lay it across the paper as in the pattern, put about a quarter of a grain of fulminating silver in that part marked S, and while the glass composition is moist, put the paper marked No. 2 over the furthest row of glass. Over all paste twice over the part that covers the silver, a piece of paper, let it dry, and when you wish to explode it, take hold of the two ends and pull them quickly from each other, when a loud report will be produced.

TO MAKE SQUIBS AND SERPENTS.

First make the cases, of about six inches in length, by rolling slips of stout cartridge paper three times round a roller, and pasting the last fold, tying it near the bottom as tight as possible, and making it air tight at the end by sealing wax. Then take of gunpowder half a pound, one ounce of charcoal, one ounce of brimstone, and half an ounce of steel filings; grind them with a muller or pound them in a mortar. The cases being dry and ready, first put in a thimbleful of powder, and ram it hard down with a ruler, then fill the case to the top with the aforesaid mixture, ramming it hard down in the course of filling it two or three times; when this is done, point it with touchpaper, which should be pasted on that part which touches the case, otherwise it will be liable to drop off.

TO MAKE SKY ROCKETS.

As the performance of rockets depend much upon their moulds, they should be made according to the following proportions:—Taking the diameter of the orifice, its height should be equal to six diameters and two-thirds; the choke, one diameter and one third of this model, will serve for every rocket from four oz. to six lbs.; for instance, suppose the diameter of a rocket of one pound be one and a-half inch, then its length being six diameters and two thirds, the length of the case must be ten inches one-eighth, and the choke two and a quarter inches. Your rammer must have a collar of brass to prevent the wood from splitting.

The principal part of the performance of the rocket depends on the compositions being well mixed; therefore great care must be taken in this part of the work, particularly in the manufacture of rockets.

Rockets are filled hollow, otherwise they would not ascend. The charge of rockets must always be driven above the piercer, and on it must be rammed a thin head of clay, through the middle of which bore a small hole to the composition, that when the charge is burned to the top, it may communicate its fire through the hole to the stars in the head. When you load the heads of your rockets with stars or serpents or any thing else, remember always to put a ladlefull of powder into each head.

TO MAKE RED FIRE.

The beautiful red fire which is used in the theatres is composed of the following ingredients:—Forty parts of dry nitrate of strontian, thirteen parts of finely powdered sulphur, five parts of chlorate of potash, and four parts of sulphuret of antimony.

TO MAKE GREEN FIRE.

Take of flour of sulphur thirteen parts, of nitrate of baryta, seventy-seven, of oxymuriate of potassa, five, of metallic arsenic, two, of charcoal three. The nitrate of baryta should be well dried and powdered.

TO MAKE A BLUE CANDLE.

These cases are made much the same as for serpents, and are filled with a composition of a quarter of an ounce of salt-petre, half an ounce of powder, and one ounce of sulphur.

A very small quantity of charcoal may be added, which will have a sparkling effect.

TO MAKE AN ARTIFICIAL VOLCANO.

For this curious experiment, which enables us to assign a very probable cause for volcanoes, we are indebted to Lemery. Mix equal parts of pounded sulphur and iron filings, and having formed the whole into a paste with water, bury a certain quantity of it, forty or fifty pounds for example, at the depth of about a foot below the surface of the earth. In ten or twelve hours after, the earth will swell up and burst, and flames will issue out, which will enlarge the aperture, scattering around a yellow and blackish dust. It is not impossible that what is here seen in miniature, takes place on a grand scale in volcanoes: as it is well known that they always furnish abundance of sulphur, and that the matters they throw up abound in metallic, and probably ferruginous particles; for iron is the only metal which has the property of producing an effervescence with sulphur, when they are mixed together. But it may easily be conceived, from the effect of a small quantity of the above mixture, what thousands of millions of pounds of it would produce; there is no doubt that the result would be phenomena as terrible as those of earthquakes and of volcanic eruptions, with which they are generally accompanied.

HOW TO EAT FIRE, AND TO BLOW IT UP IN YOUR MOUTH.

Anoint your tongue with liquid storax, and you may put a pair of tongs into your mouth red hot, without hurting yourself, and lick them till they are cold, by the help of this ointment; and by preparing your mouth thus, you may take wood-coal out of the fire, and eat it like bread; dip it then into brimstone powder, and the fire will seem more strange, but the sulphur puts out the coal. You may put a piece of burning charcoal into your mouth, and suffer a pair of bellows to be blowing it continually, and receive no hurt, but your mouth must be quickly cleaned, otherwise it will cause a salivation: it is a very dangerous thing to be done, and although those that practise it, use all the means they can to prevent danger, yet it is seldom these fire-eaters have a good complexion.