MAGIC FOR AMATEURS—XV

AUTOMATIC APPARATUS FOR CARD TRICKS

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NO. 34. A PHANTOM CARD FRAME.

One of the most ingenious mechanical devices for use in card tricks is the phantom card frame shown in Fig. 53, where *A* represents the front, *B* an interior back view, and *C* an exterior end view. It is automatic in action, yet easily made from articles common in every household.

A picture frame *n* about eleven by fourteen inches in size, fitted with glass, a set of shade brackets *oe*, a spring shade roller *r*, and a dark-colored (preferably black or dark green) shade, are the chief requisites.

The glass should be securely fastened in the frame with tin tacks or matting tacks. The shade bracket used for the spring end of the roller is screwed to the inside of the frame near the top at *o*, so that its slot opens upward. The end of the roller belonging in this bracket is then inserted, and the roller is marked to be cut so that when the other end piece and the bracket are fixed in place, the latter near the top of the frame at *e* in line with the other bracket and the former on the cut end of *r*, the roller works freely.

A shallow wooden case *m* for the back of the frame must next be made; this should be closed except on the side toward the front, and be deep enough to enclose the spring roller equipment. It should be held to the frame proper by hooks *hh* at the sides. Narrow wooden strips *i*, etc., nailed to the back of the frame serve well as guides within which the case can be held securely by the side hooks. The inner back side of the case *m* must be covered with some of the dark-colored shade material. Mucilage or paste should be used to make it adhere to the wood.

The shade material to be used on the roller must now be cut and fastened in place. It should be wide enough to project well beyond the inner side edges of the mat *d* pasted on the inner surface of the glass to screen the roller *r*, etc., from the front. In length it should be about three inches longer than the inside height of the frame. Tack one end of the shade to the roller, using ordinary shade tacks for the purpose. Turn over the other end of the shade and stitch it, leaving a hem in which to insert a stick. The length of the stick should be equal to the width of the shade, and it should be thick enough not to be drawn between the roller and the top of the frame, else the shade will be carried around and entirely unrolled. A narrow wooden strip *x* nailed to the inner top of the frame against the glass will aid in stopping the stick at the proper place.

The usual latch or pawl on the spring end of the roller should now be pried off, so that the shade will be freely drawn up on the roller when released. The next step is to provide the catch *s* to hold down the shade when it is desired to have it act as a screen. The catch should consist of a fairly heavy wire bent as shown and twisted loosely around a staple *p*, on which it can work as a fulcrum, the staple being driven into the frame across a groove *f* cut into the lower back part of the frame. When the lower curved portion of the wire *s* is pushed backward, the upper curved portion will move forward, and *vice versa*. If then the shade be pulled down and the stick in its hem forced under the upper curved end of the wire, the shade will be held down until the lower part of the wire is pushed forward. A small piece of tin bent tightly over that portion of the covered stick where the wire *s* engages with it from behind, makes the action of the catch more sensitive and more sure.

The frame is now ready for use. Three cards, duplicates of which must later be forced on one of the spectators either by using a pack of three suits as described in Trick No. 16, or by thumb manipulation of the lower cards in the pack as described in Trick No. 3, are fastened by paste, glue, or thumb-tacks to the dark shade-covered back of the case *m*, so that they can be seen readily in the front view *A*, through the glass *w* of the frame when *m* is hooked in place. The shade is next drawn down and secured by the catch *s*, and after the two parts of the frame are fastened together, the device is hung against the wall by a short cord fastened to the hooks *u* and *v*, care being taken not to allow anything to touch the wire *s* so as to cause it to release its hold on the shade. By using a short cord the top part of the frame is held against the wall, and its lower part slants outward so that the wire *s* does not come in contact with the wall.

After the three forced cards have been drawn, and carefully noted by the spectators, they are returned to the pack. The performer calls attention to the empty picture frame hanging on the wall and, taking the pack, asks the audience to watch their chosen cards pass from the pack, fly through the frame, and affix

themselves within it. He then throws the pack against the lower part of the frame, so as to cause it to swing backward. The lower curved portion of the wire *s* is thus forced against the wall which, in turn, presses this part of the wire outward and causes its upper end to move back, so as to release the shade and allow it to fly upward.

The shade having the same color as its background, and the movement being rapid, leaves the spectators in doubt as to what has taken place, the effect being as though the chosen cards had actually passed out of the pack and placed themselves within the frame, under the direct gaze of the audience.

Although it is not wise to pass the entire frame to the audience for inspection, it is advisable to show and hand out as much of it as possible. Therefore, take down the frame from the wall and, laying it on its back upon the table, unfasten the side hooks *hh* and hold up the front part, keeping its pretty side toward the audience.

Tap the glass lightly to indicate what it is, and hold the frame in front of the face to show that it is transparent. Tell the audience this part of the frame is really so simple that it is a shame to waste time describing it, but that the back part is much more complicated. Then place the frame front upward upon the table, and take up the case *m*. As there is no objection to having the audience inspect this part, and as

Fig. 53.—A DISCARDED PICTURE FRAME, WINDOW SHADE AND ROLLER, WITH AMATEUR CARPENTER WORK MAKE A HIT WITH CARDS ON ANY AUDIENCE. FRONT, REAR, AND SIDE VIEWS OF DEVICE SHOWN HERE.

an examination of it coupled with the remarks just made lead the spectators to believe they have seen all, none but a crusty old fakir would refuse to extend this courtesy to his audience.

The Fifth International Balloon Race for the Bennett Trophy.

Ten balloons left St. Louis late in the afternoon of Monday, October 17th, in a record-breaking race for the Bennett trophy. Four countries were represented in the race, France and Switzerland having two balloons each, while Germany and America had complete teams of three each, as allowed by the rules. All the balloons made a good start between 4:40 and 5:54 P. M., and soon disappeared from view following a northerly course.

The first balloon to descend was the American entrant "Million Population," Louis Von Phul, pilot, and Mr. O'Reilly, aide. This aerostat descended six miles north of Racine, Wis., at 7:25 A. M., Tuesday, after covering about 320 miles air line distance. Its highest altitude—4,500 feet—was attained near Vernon, Ill., during the night. The pilot claimed his balloon had small holes eaten in it by grasshoppers as it lay exposed on the ground the night before the race, and that owing to its leaky condition, as well as lack of ballast, it could not stay up longer.

The first balloon to start from St. Louis, and the second to descend, was the "Condor" of M. Jaques Faure, which alighted four miles north of Two Rivers, Wis., after sailing over Lake Michigan from Sheboygan. The "Condor" passed Racine at 6:30 A. M.

and Two Rivers at noon. A note dropped at the latter place showed that the balloon had been traveling close to the surface of the lake. The landing was made late Tuesday afternoon after 21 hours in the air. M. Faure and his aide, M. Schmolck, said that while 9,000 feet above Lake Michigan Tuesday morning they struck a cool spot that caused so sudden a contraction of the gas that they dropped over 6,000 feet in 10 minutes. They threw out all their ballast and finally had to drop their drag rope, after which they kept at a height of only 50 feet until they finally landed. The distance covered by the "Condor" was about 420 miles.

The third balloon to come to earth was the "St. Louis IV." of Mr. H. E. Honeywell, which landed near Hillman, Montgomery County, Mich., late Tuesday. The aeronauts were nearly out of ballast and so were unable to cross Lake Huron after having crossed Lake Michigan successfully. The air line distance traversed was about 570 miles.

Alfred Leblanc's balloon "Isle de France," the fifth to descend, traveled a much greater distance than any of the others yet mentioned. M. Leblanc, being an aviator of note as well as a balloonist, was obliged to descend before he got too far away, in order to appear at the Belmont Park aviation meet on Saturday. Accordingly he landed in a forest three miles north of Pogamasing, Ont., after a trip of 34 hours and 36 minutes duration. The distance he covered was about 710 miles.

The German balloon "Harburg II." (Lieut. Leopold Vogt, pilot, and William F. Assman, aide) was the fourth to descend, which it did at 11 o'clock Tuesday night, landing with terrific force upon the surface of Lake Nipissing, Ont., after a drop of 18,000 feet. The distance they covered was 850 miles. Theirs was one of the most exciting aerial journeys on record. They passed over Milwaukee, Wis., at 6:35 A. M. Tuesday after an uneventful night spent at an altitude of 6,000 feet. After crossing Lake Michigan, Grand Haven, Mich., was reached at 9:55 A. M., and Lake Huron came within view at 1:10 P. M. By 3 P. M. they completed the crossing of Lake Huron at Alpena, and three hours later they were above Canada. At 9 P. M. Lieut. Vogt attempted to land, as the ballast was getting low, but he found himself above Georgian Bay. After crossing the bay and attempting to land by the drag rope, Lieut. Vogt again ascended to a great elevation, and while at a height of 18,000 feet he pulled the valve cord, causing the balloon to make a terrifying drop. The wind caught it in its swift descent and carried it over the water. The impact was so hard that both aeronauts were knocked unconscious momentarily. Lieut. Vogt swam to a nearby island and towed the balloon and his aide, landing both safely. Mr. Assman tied the balloon to a tree, despite a broken arm and other severe injuries. The next morning some Indian hunters rescued both men.

The sixth balloon to descend was the "Helvetia" of Col. Theodor Schaeck, which landed north of Lake Temiscaming, in the province of Quebec, Can., on Wednesday morning. The distance traversed was about 800 miles.

The "Germania," the only aluminium-coated balloon in the race, landed Wednesday morning at Coocoo-cache, 179 miles north of Quebec. Capt. Von Abercron was the pilot and Herr A. Blankertz aide of this balloon. The time in the air was 36 hours, and the distance covered over 1,200 miles, so that in all probability the world's distance record of Count de la Vaulx has been beaten.

Two other balloons had not been heard from at the time of our going to press, and the Canadian authorities have been asked to institute a search in the forests of Canada. The missing balloons are the "America II.," manned by Messrs. Hawley and Post, and the "Düsseldorf II." of Lieut. Hans Gericke, with S. F. Perkins as aide.

The eighth balloon to be heard from was the "Azorea" of Switzerland, piloted by Emile Messner and Leon Givandau, which landed in the wilderness 32 miles northeast of Biscotasing, in the Algoma district of Canada. The balloonists spent three days and a night working their way through the woods and swimming across a lake. The temperature was 11 deg. F. during the night. The distance covered by this balloon probably equals that covered by the "Germania."

Phosphorescent Enamel.—Mix 15 parts of luminous color, 10 parts of fluor spar or cryolite powder and 3 parts borate of calcium, rub the whole down with water, apply it to porcelain, glass, etc., and burn it in the ordinary manner.