A NOVEL MAGAZINE CAMERA.

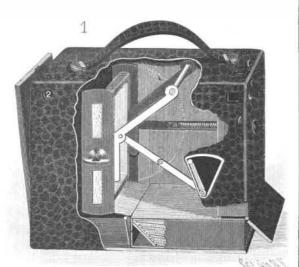
How to get the most out of the time at command is an important question in matters of recreation, as well as business. Some cling to old methods, and are satisfied with the way things were done years ago; but others find that by adopting improved methods and apparatus, more can be accomplished in a given time and in a more satisfactory way.

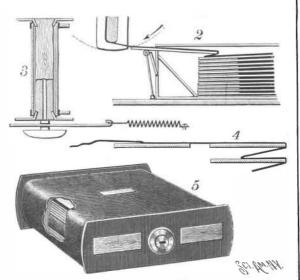
This applies to everything, but to nothing more pertinently than photography.

From slow plates and lenses and quick plates and magazine cameras; from roll holders and cameras to be loaded with films by daylight, we turn to an invention which allows the photographer to retain all the good qualities of glass plates and at the same time to secure the advantages of loading by daylight.

Messrs. Benjamin Marx and Henry Gassner, 2695 Third Avenue, New York, are the patentees of the camera to which reference is made, and which is shown in the engravings. Fig. 1 shows the camera with the side and top broken away to show internal construction and Figs. 2 to 5 inclusive show the de tails of construction.

The camera does not differ materially in external appearance from the usual form of hand camera. It has an objective and two finders. The glass plates used are placed in regular order on a long strip of tough paper, each being held in position by a mat which





MARX AND GASSNER'S MAGAZINE CAMERA.

barely covers the edge of the plate and is fastened to the paper.

The strip on which the plates are thus mounted is folded back and forth upon itself in a light-tight box. with the plates between the folds, as shown in Figs. 1 and 2. The side of the box is provided with an incline to facilitate removing the plate from the box. The box of mounted plates is sealed with the end of the paper strip projecting through a slit. The box is put

position. This operation also locks the angled levers by means of the toggle joint connected therewith.

After the exposure is made, another plate may be brought [into position for exposure by releasing the reel and turning it through a half revolution. The operation of focusing the plate and locking the reel is the same as before.

When all of the plates have been exposed, the blank paper contained in the plate box is wrapped around the exposed plates by turning the reel, and, with the reel heads, makes a light-tight package which is removed from the camera and sealed as shown in Fig. 5.

The empty plate box is removed and replaced by a full one, another reel is placed in the camera, and the operation just described is repeated.

It will thus be seen that there is practically no limit to the number of plates that can be exposed in this camera.

It can be loaded in broad daylight. It exposes a dozen or more plates at one loading, and is lighter than other cameras of the same capacity using plates.

SPIRIT SLATE WRITING AND KINDRED PHENOMENA.-I. BY W. E. ROBINSON

There has probably been nothing that has made more converts to spiritualism than the much talked of "Slate Writing Test," and if we are to believe some of the stories told of the writings mysteriously obtained on slates, under what is known as "severe test conditions" that preclude, beyond any possible doubt, any form of deception or trickery, one would think that the day of miracles had certainly returned; but we must not believe half we hear nor all that we see, for the chances are that just as you are about to attribute some unaccountable spirit phenomena to an unseen power, something turns up to show that you have been tricked by a clever device which is absurd in its simplicity.

There are a large number of methods of producing slate writing, but the writer will describe a few which will be sufficient to give an idea of the working of slate tests in general. First we have the ordinary one in which the writing is placed on the slate beforehand, and then hidden from view by a flap or loose piece of slate. (Fig. 1.) After both sides of the slate have been cleaned, the false flap is dropped onto the table, the side which is then uppermost being covered with cloth similar to the table top, where it will remain unnoticed, or the flap is allowed to fall into a second slate with which the first is covered. In the latter case no cloth is pasted on the flap. Sometimes the flap is covered with a piece of newspaper and is allowed to drop into a newspaper lying on the table, then the newspaper containing the flap is carelessly removed, thus doing away with any trace of trickery.

Another way of utilizing the false flap is as follows: The writing is not placed beforehand on the slate, but on the flap, which, as before, is covered the same as the table top. This is lying on the table writing downward. The slate is handed around for inspection, and, on being returned to the performer, he stands at the table and cleans the slate on one side, then turns it over and cleans the other. As he does so he lifts the flap into the slate. The flap is held in firmly by an edging of thin pure sheet rubber cemented on the flap between the slate and the cloth covering of the slate. This grips the wooden sides of the frame hard enough to prevent the false piece from tumbling out accidentally.

We now come to another style, wherein a slate is cleaned on both sides, and, while held in the hand facing the audience, becomes suddenly covered with writing, and the slate is immediately given for inspection. The writing is on the slate previous to the cleaning, and is hidden from view by a flap of slate colored silk, held firmly in place by a pellet of wax in each of the corners of the silk. (Fig. 2.) Attached to this silk flap or covering (at the end that is nearest to the performer's sleeve) is a stout cord or string, which is also made fast to a strap around the wrist of the hand opposite to that holding the slate. If the arms are now extended their full length, the piece of silk covering will leave the slate

stud of hard rubber or leather. This allows the cloth to be pushed up and down, bringing the back to the front; and by doing so quickly, the writing which is written on the cloth at the rear of the frame is made to come to the front in plain view. (Fig. 3.)

Still another idea in a single slate is as follows : An ordinary looking slate is given for examination, and, on

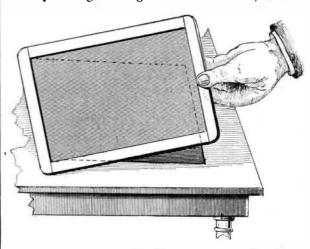
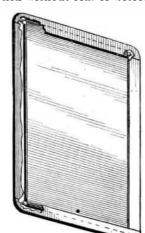


Fig. 1.-ORDINARY SLATE WITH FLAP.

its being returned to the medium, he takes his handkerchief and cleans or brushes both sides of the slate with it; and, upon again showing that side of the slate first cleaned, it is found covered with writing apparently done with chalk. The following is the simple explanation of it: Take a small camel's hair brush and dip it in urine or onion juice, and with it write or trace on the slate whatever you desire, and when it becomes dry, or nearly so, the slate can be given for examination without fear of detection. The handkerchief the



performer uses to clean the slate with is lightly sprinkled with powdered chalk. He makes believe to clean the one side devoid of preparation, but the side containing the invisible writing is gently rubbed with the handkerchief, not too hard, just enough to let the powdered chalk fall on the urine or onion juice, where it leaves a mark not unlike a chalk mark.

Casualties in the Army.

Adjutant-General Corbin has prepared a list showing the total number of officers and men who were either killed or wounded during the Sant-

Fig. 3.—THE ENDLESS BAND SILICATE TRICK SLATE.

iago campaign. On June 30 the American army in Cuba consisted of 852 officers and 17,358 enlisted men. Of this number 23 officers and 222 men were killed and 92 officers and 1,285 men wounded. According to the official records the Santiago campaign only extended from July 1 to July 17, and this list does not include any of the casualties which occurred after the latter date.



in its place in the camera with the end of the strip projecting.

In the camera box is placed a flat reel provided with journals on which it can turn. The body of the reel is wood. It is made in two pieces, so that it can be folded together compactly. The metal heads of the reel are removable, thus permitting of carrying an extra reel in the camera. When it is desired to use more than two dozen plates, an extra reel may be carried in the pocket. An eyelet in the end of the paper strip is placed on a hook on the reel, and after the end of the camera is closed the reelis turned, thus bringing a plate from the box and folding it down on the face of the reel.

The journals of the reels are pulled forward by springs, as shown in Fig. 3, and when the plate is brought into an approximately vertical position, a pair of angled levers secured to a rock shaft are brought and bottom pieces of the frame, the ends being made into contact with the plate, causing the plate to stand hollow to receive them. Over these rollers runs the in the focal plane, the springs which draw the reel for-

and pass rapidly up the sleeve out of the way, and thus leave the writing exposed to view; and the slate is found to be still a little damp from the cleaning with the sponge and water it had been given previously. This is easily accounted for. The water from the sponge penetrates just enough through the cloth to dampen the slate.

There is still another slate on which we can make the writing appear suddenly. It is composed of a wooden frame, such as all wooden-edged slates have, but the slate itself is a sham. It is a piece of cloth painted with a kind of paint known as liquid slating, which, when dry and hard, is for all the world like the real article. This cloth is twice the length of the slate and just the exact width. The two ends of the cloth are united with cement, so as to make an endless piece or loop. There is a small rod or roller in both the top cloth, stretched firmly and tightly. Just where the ward yielding as the angled levers are brought into cloth is joined or cemented is a little black button or