

FIGS. I AND 2.—PHOTOGRAPHIC NECKTIE.—FRONT AND BACK VIEW.

plates so perfectly that they can only be separated by sliding them apart, may be considered no mean art.—Quirk in the Scientific American.

## THE PHOTOGRAPHIC NECKTIE.

Where will the progress of instantaneous photography end? In view of the admirable results obtained by scientists, and especially by Mr. Marey, inventors have for several years been setting their wits to work to devise small apparatus for allowing amateurs to take photographs without any one seeing them do it. We have already made known the photographic opera glasses and hat; but here we have something cleverer, and designed to meet with great success among practicians: it is a question of a necktie provided with a pin. The latter is an objective, and the necktie is a camera. When any one approaches you and speaks to you at a distance of 2 or even 3 ft. you press a rubber bulb concealed in your pocket, and you have the portrait of your interlocutor.

This ingenious little apparatus, with which also general views may be taken, was devised by Mr. Edmond Bloch, who has operated it in our presence, and, although the instrument is not yet being manufactured for sale, we have decided to make it known to our readers at once

Fig. 1 represents the photographic necktie, and Fig. 2 gives a front view of it as it is to be worn by the operator, the metallic camera, which is flat and very light, being hidden under the vest. Fig. 1 gives a back view, the cover of the camera being removed to show the interior mechanism, comprising six small frames which are capable of passing in succession before the objective, and which permit of obtaining six negatives. The instrument may be constructed with 12 or 18 frames. The apparatus is operated as follows: The necktie having been adjusted, the shutter is set by a pull upon the button, A (Fig. 1, No. 2), which passes under the vest. In order to change the plate, it is necessary to turn from left to right the button B, which has been intro-

duced into a button hole of the vest, and which simulates a button of that garment. This button must be turned until the effect of a locking, which occurs at C (Fig. 1, No. 1), is perceived, and which puts the plate exactly before the objective. In order to open the latter, it is necessary to press the rubber bulb, D, which has been put into the trousers pocket. The rubber tube, E, passes under the vest and serves to transmit the action of the hand.



Fig. 4.—Facsimile of Portraits Obtained with the Apparatus.

In order to charge the apparatus, it is opened at the bottom by turning the small springs, G G G; the sensitized plates are put into the frames, and the springs are turned back to their former position.

The apparatus is scarcely any thicker than the ordinary necktie called "Régate." The camera that contains the plates is not more than 0-2 inch in thickness. The six frames are carried before the objective through an endless chain, as shown in the figure.

Mr. Bloch has shown us some of the photographs that he has taken with this first apparatus, which he considers as yet but an experimental instrument. We reproduce herewith three portraits obtained with the apparatus, Fig. 3, through the minute objective skilfully concealed in the centre of the pin. These photographs are about 1½ inch square, and are sufficiently sharp to allow the portraits to be recognized. If this apparatus can be well constructed, we predict a great demand for it.—La Nature.