



THE COMPTOGRAPH.

the paper, while the lever device near it is for feeding the paper backward. The machine will take paper of any width up to six inches.

The comptograph is an outgrowth of the comptometer, a universal figuring machine operated by keys, but which does no printing. The comptograph simply prints lists or columns of items and adds and automatically prints the answer beneath them at the same time. For listing checks in a bank for the use of insurance companies, for the preparation of such extended tables as are furnished by various statistical authorities, and for other purposes where clearness and rapidity of work, no less than accuracy, are difficult to obtain, this machine has already proved itself a great success. Besides its advantages in clearness and accuracy, it is said that an operator can, with very little practice, do as much work as can be done by two men in the old way. The machine is the invention of Mr. Dorr E. Felt.—*Scientific American*.

NEW LANTERN EFFECT.

Not every one can go to Europe, but, possessed of a lively imagination, one may go there in spirit, provided only that the scenes are presented pictorially

in a truthful and artistic way. Thanks first to the skill of the optician, and secondly to the modern photographic art, any one may be instructed and entertained by the modern lanternist, who will produce storm or sunshine, winter or summer, or the soft effects of moonlight at will upon the screen by the skillful manipulation of the optical lantern with a truly wonderful effect, but there are many effects which seem to be difficult of execution by means of the optical lantern. The saying is "See Naples and then die;" but what is seeing Naples without seeing Vesuvius in active eruption? Comparatively few European travelers have the good fortune to witness this phenomenon, and until now, so far as we are aware, no one has been able to faithfully represent this awe-inspiring spectacle.

Mr. H. C. Ogden, of Middletown N. Y., has come to the aid of the lanternist and the non-traveler by producing a very simple apparatus by means of which Vesuvius, in full eruption, may be projected on the screen in a very vivid and realistic manner.

Fig. 1 of the engravings shows the scene as it appears on the screen, and Fig. 2 shows the apparatus by which the effect is produced. The main idea of Mr. Ogden is illustrated in this apparatus, but our artist has added an improvement which is designed to