

W. F. BAADE & A. W. SANGSTER.

Alphabet Cases.

No. 157,113.

Patented Nov. 24, 1874.

Figure 1.

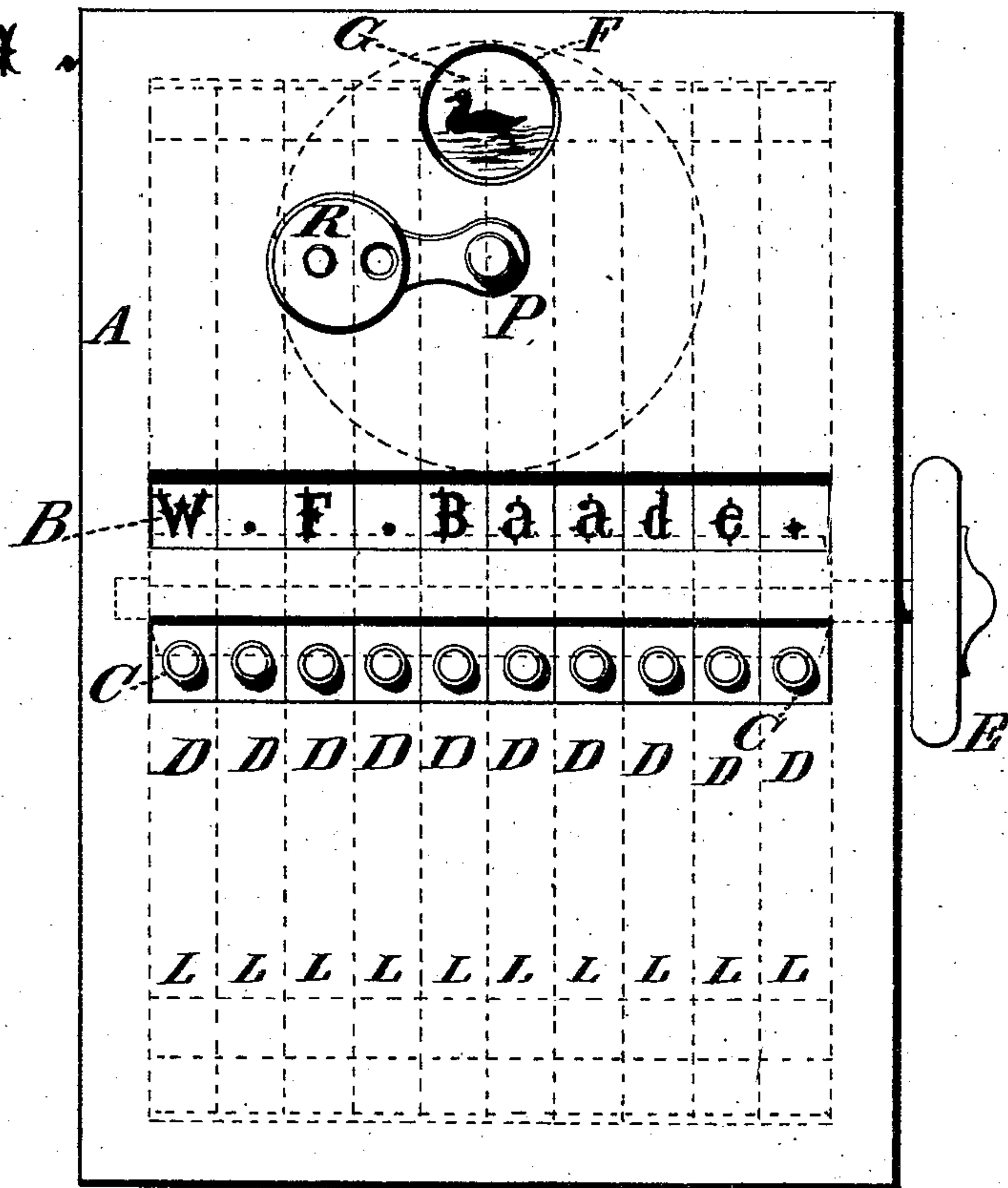
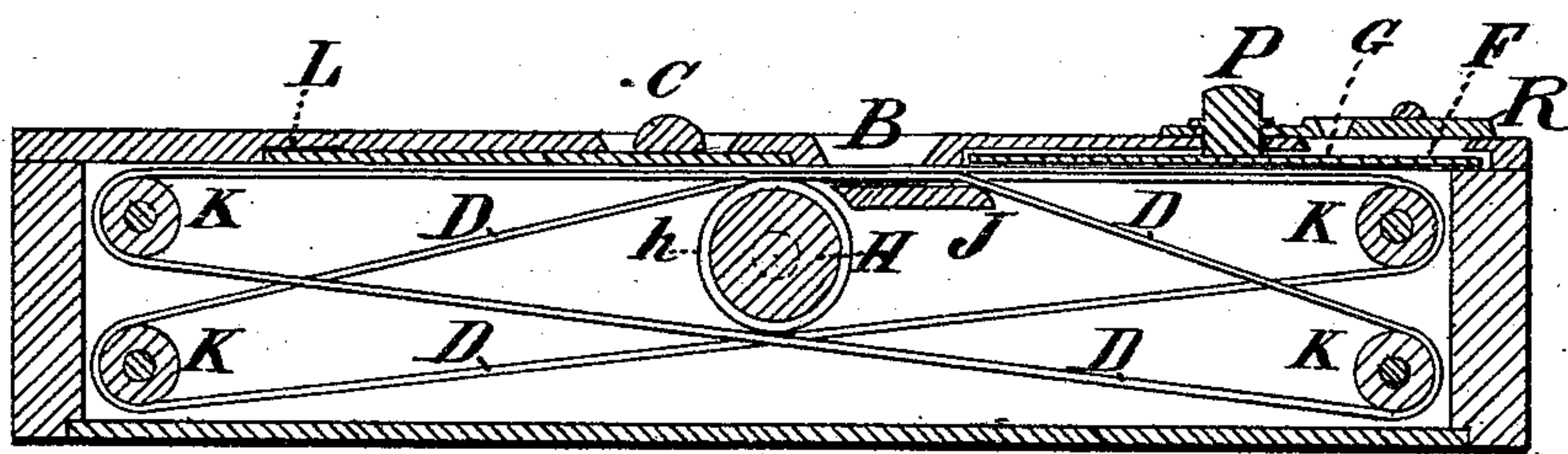


Figure 2.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN ALPHABET-CASES.

Specification forming part of Letters Patent No. **157,113**, dated November 24, 1874; application filed May 29, 1874.

*To all whom it may concern:*

Be it known that we, WILLIAM F. BAADE and AMOS W. SANGSTER, of the city of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Alphabet-Cases, of which the following is a specification:

Figure 1 represents a front or top view of our said invention. Fig. 2 is a vertical longitudinal section through the center of the same.

This invention relates to an improved means for operating or moving the alphabet-belts and picture-surfaces; and it consists, first, in the combination of a friction-roller arranged inside of the case, and within the endless alphabet belts or aprons, and a corresponding number of keys or thumb-pieces, arranged on the outside of said case, so that pressure on either of them will force its corresponding alphabet-belt against the said friction-roller, in such a manner that it can be readily moved, as may be desired, by turning the said roller, by means of a milled wheel or handle on the outside, as will be more clearly hereinafter shown. The second part of our invention consists in combining with the case a disk, arranged so as to be turned by a thumb-piece or knob on the outside, upon which pictures figures or other objects are arranged, so as to be shown through an opening made in the face of the case.

In the said drawings, in which like letters of reference indicate corresponding parts, A represents the face of the case; B, the opening through the same for exposing the letters or figures; D, the endless belts; C, the thumb-pieces, by which the required friction is produced upon the roller H for moving them. The said thumb-pieces are made of thin pieces of elastic wood, with a knob or button for the fingers to press, as shown. They are made to spring up to the face of the case, and held in place by means of glue, or in any other suitable manner, at the points indicated by the letters L. E represents the milled wheel or handle, for turning the friction-roller H. *h* is a covering of rubber, or other equivalent material, for increasing the friction when the belts D are forced against it. J is a cross-piece, for holding said belts away from the roller H, so as to prevent their moving, except when brought in contact with it by means

of the thumb-pieces C, as hereinbefore mentioned.

The arrangement of the belts and the manner in which they are held in place within the case are better shown in the section, Fig. 2. We have shown a double set of rollers, K K K K, for holding them; they are arranged alternately, as shown, one set above and one below, which prevents the belts from slipping by each other; the same result may be accomplished by one set of rollers at each end of the case, by arranging them alternately—a large and small roller—side by side.

F represents the opening through which the pictures, figures, or other objects are shown; G, the disk upon which they are printed. It is represented by the circle shown in dotted lines in Fig. 1. P is the knob, by which it is turned. A cover, R, is arranged so that the opening F may be easily closed at any time; so that an instructive as well as interesting arithmetical game may be played by children using it, by means of the figures on the disk, which may be turned when the opening F is closed, and afterward opened to expose the numbers, the largest amount in a given number of movements of the disk being the game. This compels the child to learn to add up the figures as presented, thereby affording amusement and instruction at the same time. The inner surfaces of the keys which come in contact with the alphabet-belts are made as smooth as possible, so that the said belts can move easily under them when pressed against the friction-roller H.

We claim as our invention—

1. An alphabet-case, provided with the roller H, alphabet-belts D, thumb-pieces C, handle E, the disk G, and cover R, all constructed and arranged to operate substantially as and for the purpose set forth.

2. In an alphabet-case, the opening F, cover R, rotating disk G, and turning-knob P, arranged to operate as and for the purpose described.

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