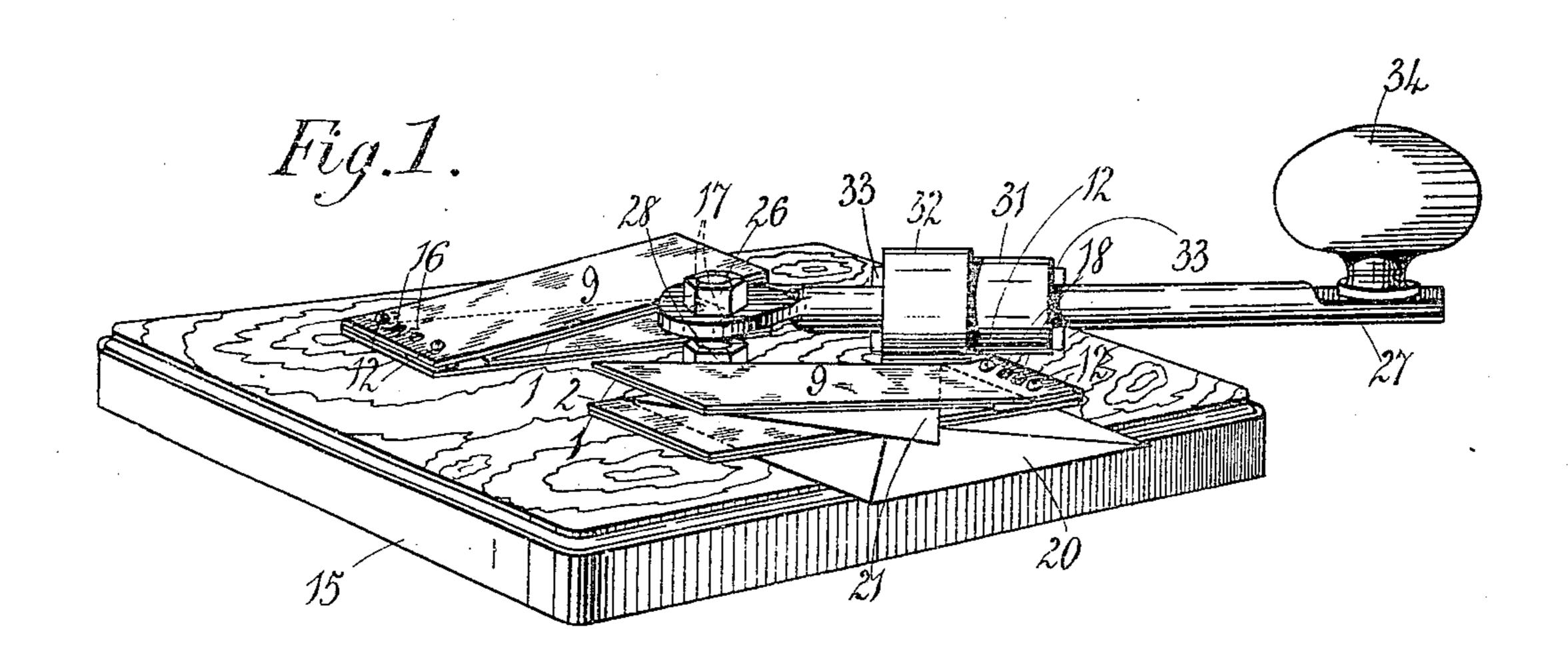
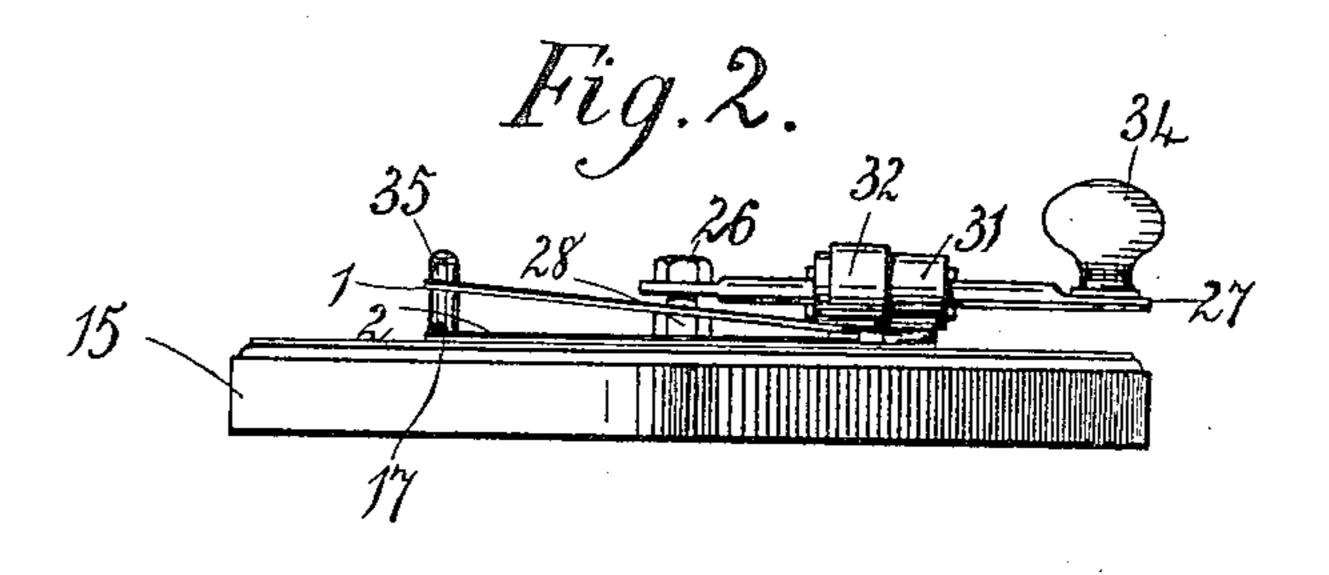
No. 816,657.

PATENTED APR. 3, 1906.

## T. HAWKINS. APPARATUS FOR EMBOSSING PAPER. APPLICATION FILED SEPT. 16, 1904.

2 SHEETS-SHEET 1.



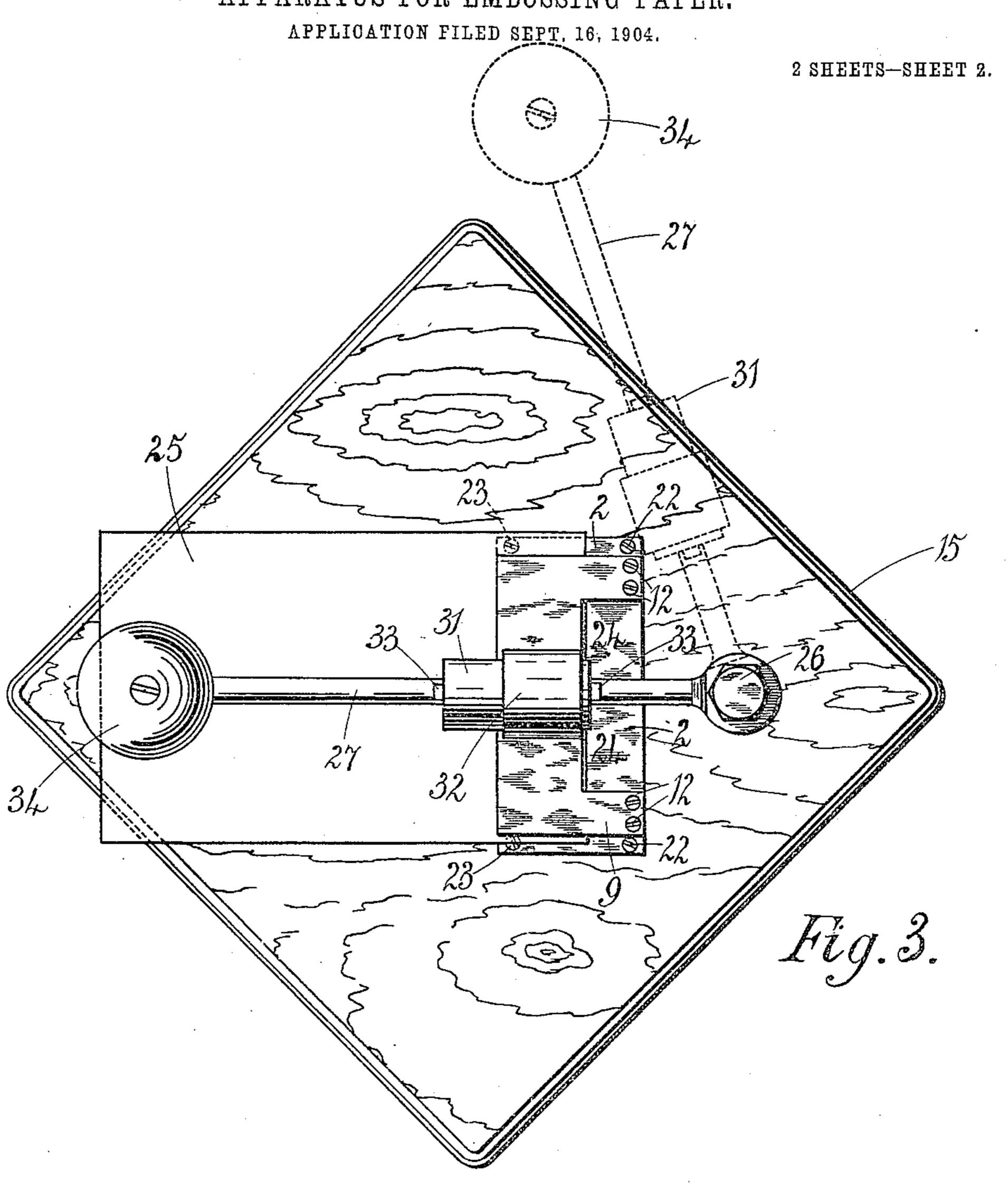


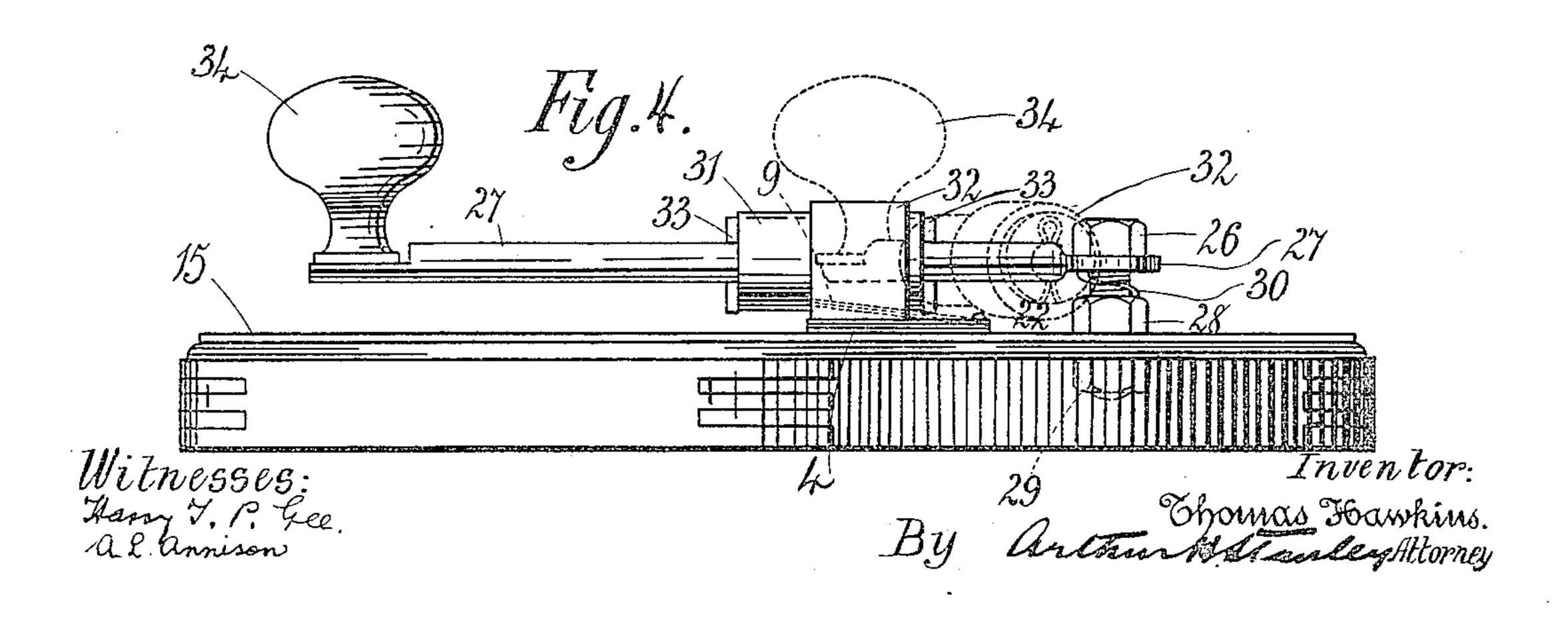
Witnesses: Harry T. P. G. Inventor:
Thomas Hawkius.

By

Arthur Hetanley Attorney.

T. HAWKINS.
APPARATUS FOR EMBOSSING PAPER.





## INITED STATES PATENT OFFICE.

THOMAS HAWKINS, OF LONDON, ENGLAND.

## APPARATUS FOR EMBOSSING PAPER.

No. 816,657.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed September 16, 1904. Serial No. 224,760.

To all whom it may concern:

citizen of the United States of America, residing at 40 Marchmont street, Russell Square, 5 London, England, have invented certain new and useful Improvements in Apparatus for Embossing Paper and the Like, of which the following is a specification.

The present invention has reference to an 10 improved embosser for embossing paper and the like, especially note-paper and envelops.

The apparatus is cheap to manufacture

and easily portable.

The accompanying drawings illustrate a 15 convenient manner of carrying out the inven-

tion, wherein—

Figure 1 is a perspective view of the embosser carrying two dies—the farther one for embossing note-paper and the near one for 20 embossing envelops. Fig. 2 is a part plan of the embosser, showing a detail. Figs. 3 and 4 are plan and elevation, respectively, of another form of embosser carrying only one die and intended chiefly for embossing note-pa-

25 per.

First, with reference to Figs. 1 to 4, a single die or a pair of dies are mounted on a base-board 15, as shown in Fig. 1, the lines of embossments running lengthwise of the 30 dies. In this case the farther die is for embossing note-paper, and it is secured to a base 15 by screws 16, which pass through the upper and lower portions of the die, and said die is further secured by screws 17, 35 which pass through the lower portion only of the die and then into the base, the die being open at this end, as shown, in order to readily admit the paper. The near die is for embossing envelops, and it is secured to the base at 40 one end only by screws 18. An envelop is shown introduced into the die and ready to be embossed, the male (or lower) portion of the die lying between the body 20 and flap 21 of the envelop and the female portion above 45 the flap.

In Fig. 1 the dies are secured to the base along a line at right angles to the lines of embossments; but in Figs. 3 and 4 the die, which is of similar construction to those in Fig. 1, is 50 secured to the base by screws 22 at its fixed side and screws 23 at its free or open side along a line parallel with the lines of embossments which run lengthwise of the die, a recess being formed in the upper portion of the 55 die at 24, by which inspection of the edge of

the paper 25 is facilitated when embossing.

The means for producing the pressure upon Be it known that I, Thomas Hawkins, a | the die in Figs. 1, 3, and 4 comprise a bolt 26, passed through an eye in one end of a lever 27 and secured to the base 15 by means of 60 two nuts 28 and 29, one on each side of the upper part of the base. A spring-washer 30 surrounds the bolt and retains the eye end of the arm 27 normally raised. A roller 31, having a band of hard india-rubber or the 65 like 32, works upon the lever 27 and is held in position thereon by means of two pins 33.

The piece of paper or envelop to be embossed is introduced into the die after the roller has been swung free therefrom, and 70 then pressure is brought to bear upon the handle 34, which is now swung through the arc of a circle, thereby causing the rubber band to travel over the face of the upper die and produce embossments upon the paper. By 75 the use of the embosser shown in Fig. 1 both paper and envelop can be embossed practically simultaneously by moving the lever through about three-quarters of a circle. The pressure being produced by rolling contact it 80 will be seen that the total pressure which the roller is capable of producing upon the die (and therefore the paper) will be distributed along a line coincident with the contact-line between the roller and die, and this condition 85 will hold during the whole travel of the roller, which is an important difference between this form of embosser and the old forms in which the total pressure given to the die is distributed over its whole area, and is there- 90 fore not so effective. The dotted lines in Figs. 3 and 4 show the rod 27, &c., swung out of operation and the die open. When only one die of the form shown in Fig. 1 is employed, it is advisable, in order to prevent the 95 roller from accidentally entering between the two parts of the die, and so, perhaps, distorting the latter, to provide a stop for the arm 27 to abut against, and this may be effected, as shown in Fig. 2, by a pin 35 standing up from 100 the base 15.

By loosening the nuts 28 and 29 and screwing the bolt 26 in or out the level of the lever 27 can be adjusted, so as to cause the rubber band to bear evenly upon the die.

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I claim—

1. Apparatus for embossing comprising a base, a die carried by said base, and a lever for producing rolling contact-pressure upon said die.

2. Apparatus for embossing comprising a base, a plurality of dies for embossing note-

paper and envelops carried by said base, and means for producing rolling contact-pressure

upon said dies.

3. Apparatus for embossing comprising a base, a die carried by said base, a bolt 26, a lever 27 upon said bolt, means for adjusting the height of said bolt, a roller 31 upon said lever, a band 32 upon said roller, and means for holding the roller in position upon said lever.

4. Apparatus for embossing comprising a base, dies carried by said base, a bolt 26, a

lever 27 upon said bolt, means for adjusting the height of said bolt a roller 31 upon said lever, a band 32 upon said roller and means 15 for holding the roller in position upon said lever.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

THOMAS HAWKINS.

Witnesses:

H. D. JAMESON, F. L. RAND.