

(No Model.)

2 Sheets—Sheet 1.

T. D. HOOPER.

INK FOUNTAIN PROTECTOR FOR PRINTING PRESSES.

No. 462,352.

Patented Nov. 3, 1891.

Fig. 1.

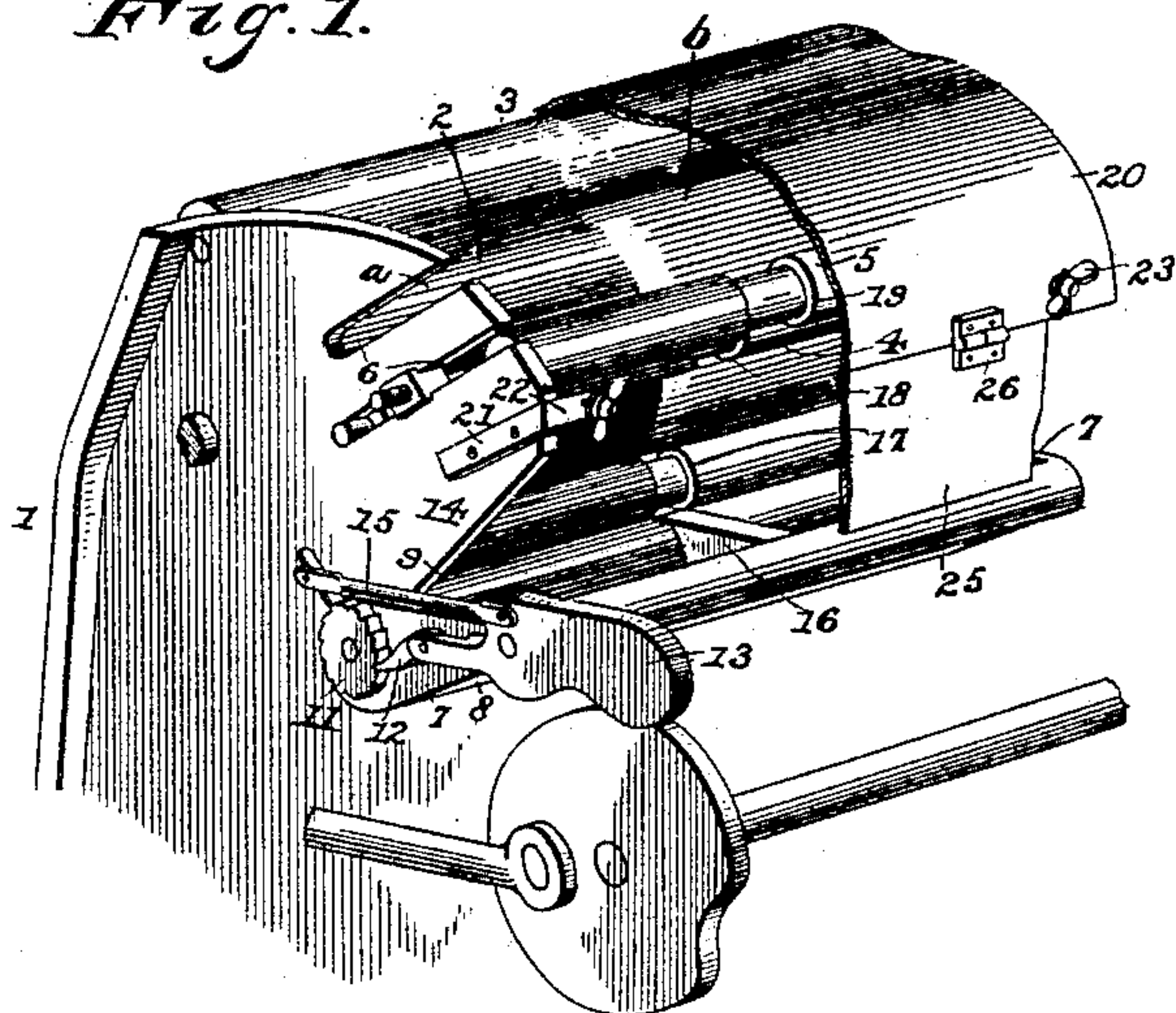


Fig. 2.

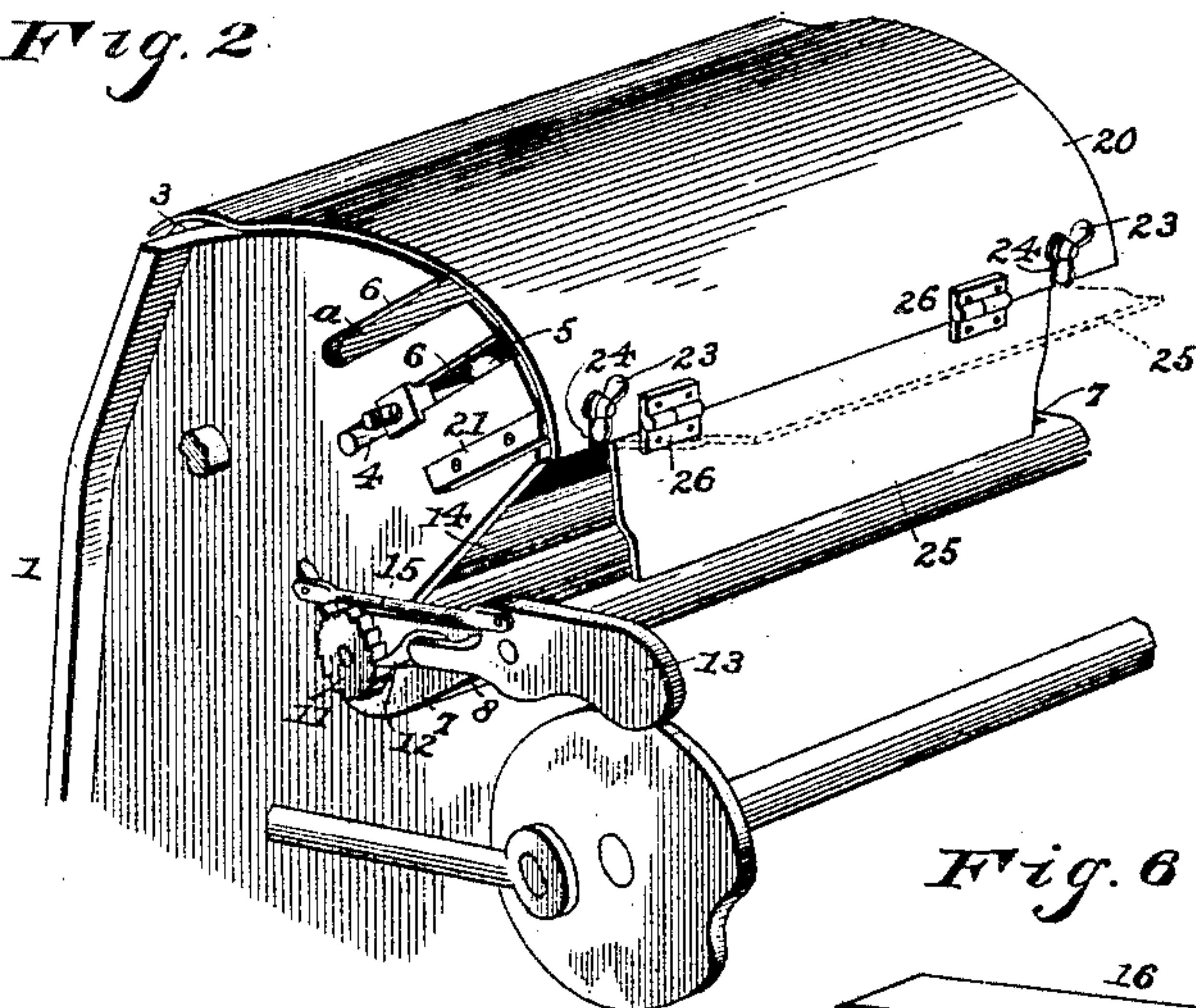
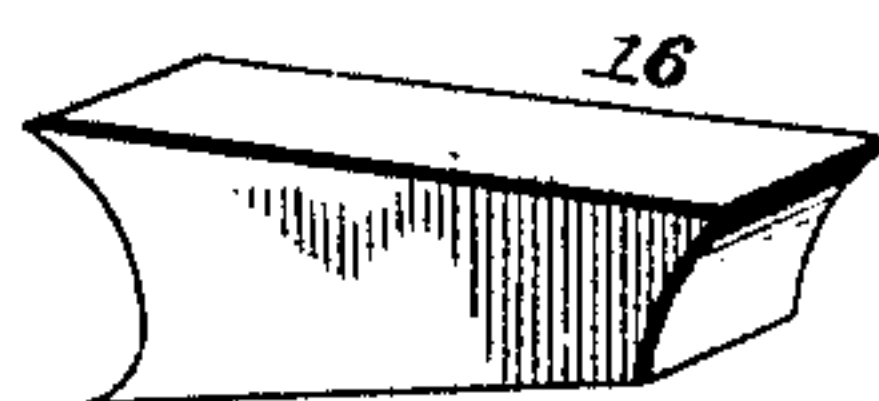


Fig. 6.



Witnesses;

J. M. Thomas.

Ray C. Bowen.

By his Attorneys,

C. A. Snow & Co.

Inventor
Thos. D. Hooper,

(No Model.)

2 Sheets—Sheet 2.

T. D. HOOPER.

INK FOUNTAIN PROTECTOR FOR PRINTING PRESSES.

No. 462,352.

Patented Nov. 3, 1891.

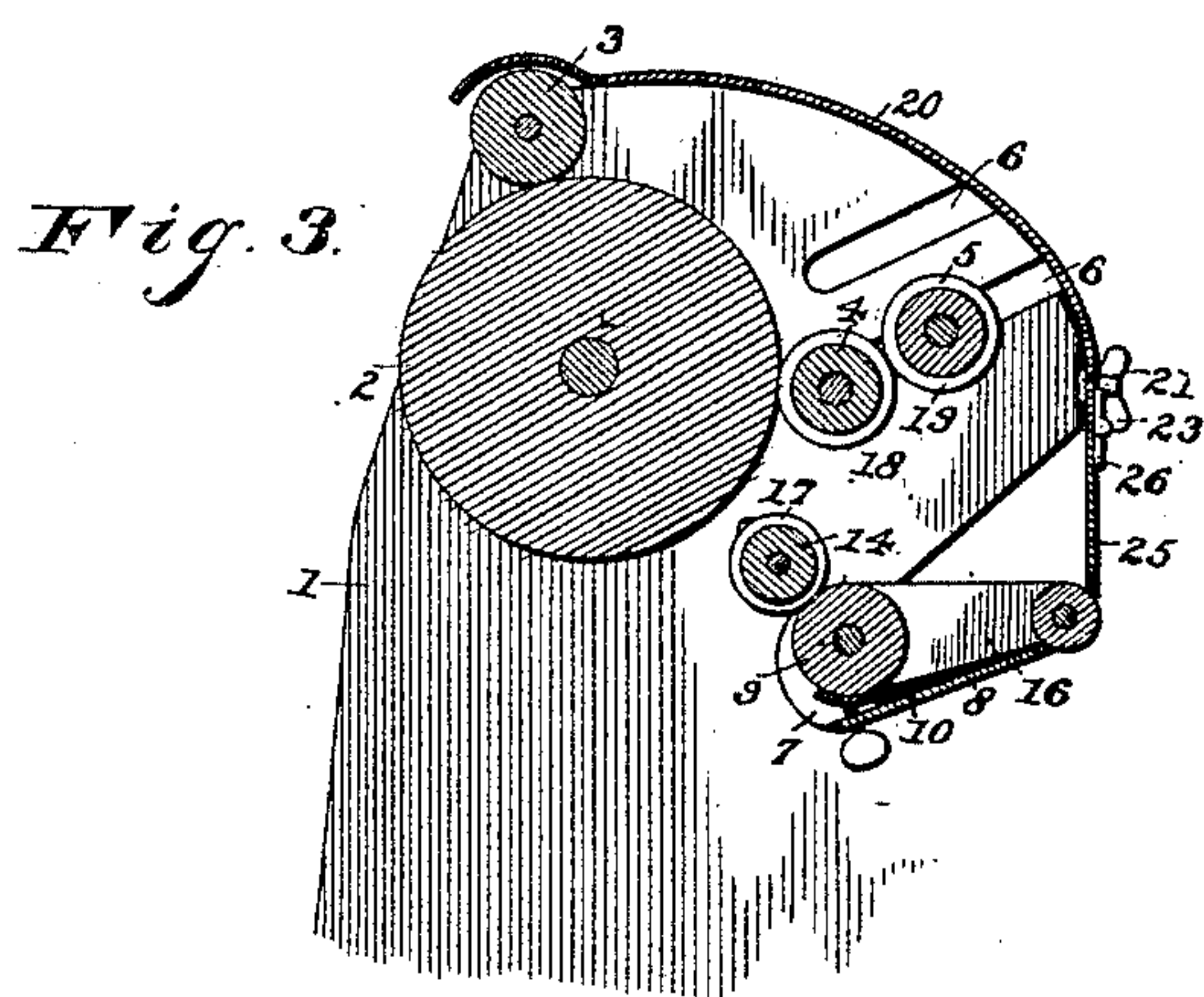


Fig. 4.

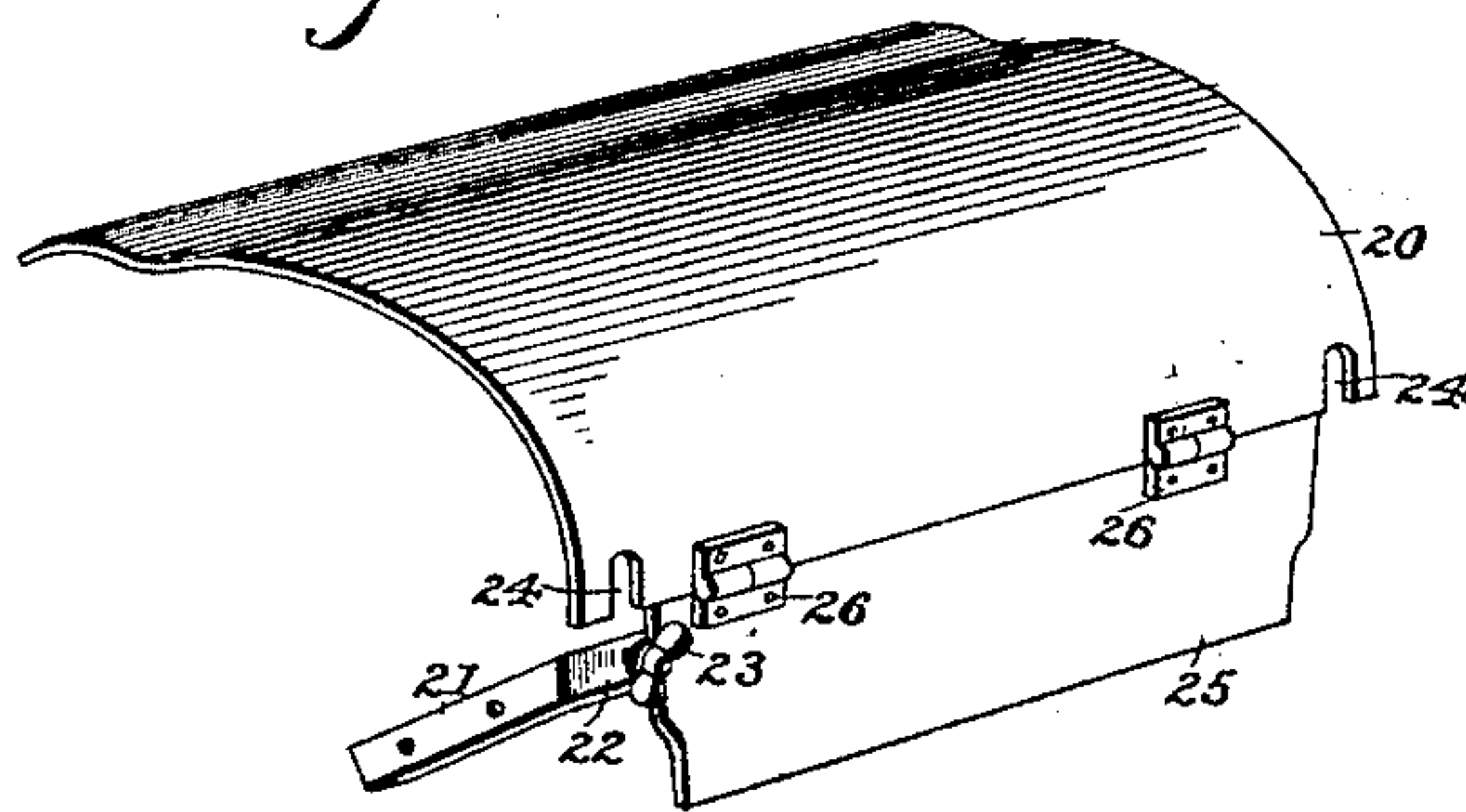
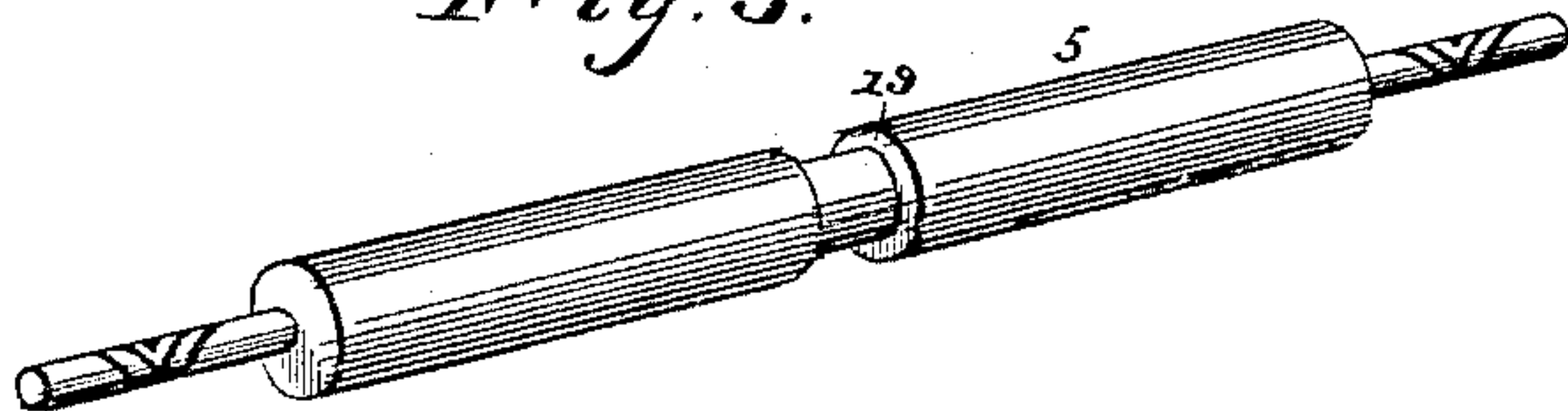


Fig. 5.



Witnesses;

John Withered.
Rey C. Bowen.

By his Attorneys,

C. A. Snow & Co.

Inventor
Thos. D. Hooper,

UNITED STATES PATENT OFFICE.

THOMAS D. HOOPER, OF PHILADELPHIA, PENNSYLVANIA.

INK-FOUNTAIN PROTECTOR FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 462,352, dated November 3, 1891.

Application filed January 20, 1891. Serial No. 378,433. (No model.)

To all whom it may concern:

Be it known that I, THOMAS D. HOOPER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Ink-Fountain Protectors for Printing-Presses, of which the following is a specification.

This invention relates to printing-presses, and has for its object to provide means for protecting the ink-fountain, distributing-rollers, and cylinders from dust, insects, and other foreign matter which frequently lodge upon the sticky ink surfaces of the said rollers, thereby hindering the smooth flow of the ink and rendering the same unfit for use. This object is attained by the use of the cover, the peculiar construction, combination, and arrangement of which will be fully described hereinafter, and the specific points of novelty particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a broken-away portion of my improvement in position upon a press having a cylinder distribution of ink. Fig. 2 is a similar view showing the cover fully applied thereto. Fig. 3 is a central vertical sectional view of the same. Fig. 4 is a perspective view of the hinged cover and supports therefor. Fig. 5 is a detail perspective view of the vibrator, and Fig. 6 is a similar view of the separating-block, both of which parts are used in the form of press to which my improvement is preferably applied.

Similar numerals of reference designate corresponding parts in all the figures.

This improvement is especially applicable to that class of printing-presses in which the ink is distributed upon cylinders, and in the drawings I have shown so much of such a press as will convey a clear conception of the application of my invention thereto.

My improved protector or cover, which will be hereinafter described, is applied, preferably, to the press having the inking devices as illustrated in the drawings and which may be briefly described as follows:

1 designates a part of the frame of the press, in which are journaled the large cylinder 2 and the small cylinder 3. The distributing-roller 4 and the vibrator 5 are journaled in the slots 6 in the usual manner.

The ink-fountain comprises the two end pieces 7 7, the bottom 8, the fountain-roller 9, and the doctor-blade 10. Upon the end of the shaft of the fountain-roller 9 is mounted a ratchet-wheel 11, which is operated by a pawl 12, carried by a lever 13, which is operated by suitable mechanism to oscillate the said lever 13 and so rotate the fountain-roller 9 in the usual way. The feeding-roller 14 is mounted in suitable oscillating bearings, which are oscillated by a pitman 15, connected at one end to said roller-bearing and at the opposite end to the lever 13, thus completing the usual construction and operation of the inking devices of the class of presses upon which my invention is designed to be applied.

In the ink-fountain is placed a sliding partition-block 16, dividing the ink-fountain into two compartments and subserving its usual function of dividing the different inks upon each side of the fountain-roller 9.

An annular recess 17 is formed in the feeding-roller 14, thus dividing the said roller into two sections, so as to feed the different-colored inks upon different portions of the large cylinder 2, forming belts *a* and *b* around the same and for keeping the various inks in their various positions, as the distributing-roller 4 and the vibrator 5 are also provided with the usual annular recesses 18 and 19.

Now, preferably to the form of press and printing devices just described, and so as to prevent dust, insects, or other foreign matter from settling upon the ink and thus rendering it thick and unfit for use, I provide a cover 20, of sheet metal, formed in the proper shape to lie snugly over the frame of the press and cover the cylinders and rollers, as shown in Fig. 2.

Strips 21 21 are secured to the frame of the press near the top thereof, said strips extending beyond the back of the frame, where they are bent inwardly, as at 22, and provided with thumb-screws 23. Recesses 24 are formed in the lower edge of the cover 20 near the ends thereof, which fit over the thumb-screws 23, the said thumb-screws being then screwed down upon the cover to hold the same in place, as will be understood by reference to Fig. 2. A depending apron 25, also of sheet metal, is hinged to the lower edge of the cover 20, as at 26 26, and normally hangs down over the ink-

fountain, as shown in Fig. 2, but may be raised, as shown in dotted lines in same figure, when necessary to inspect or refill the ink-fountain.

From the foregoing, taken in connection
5 with the accompanying drawings, it will be seen that I provide means whereby the ink-fountain, rollers, and cylinders may be protected from dust, insects, and other foreign matter, which are very injurious to the ink. It
10 will also be seen that these ends are attained by devices which are simple and cheap in construction, easily applied, and very effective for the purpose set forth, and which may as readily be applied to any other form of press
15 just as well as to that herein described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a printing-press of the class herein described, the combination of ink-cylinders, dis- 20 tributing-rollers, and an ink-fountain with a cover 20, secured upon the upper part of the frame of the press by means of strips 21 21 in proper position to cover the said cylinders and ink-distributing rollers, the said cover having 25 an apron 25 hinged thereto, adapted to cover the ink-fountain and lower rollers, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 30 presence of two witnesses.

THOS. D. HOOPER.

Witnesses:

GEORGE MCKENZIE,
JAMES C. AHERN.