

(No Model.)

W. O. CRANE.
COPY HOLDER.

No. 504,414.

Patented Sept. 5, 1893.

Fig. 1

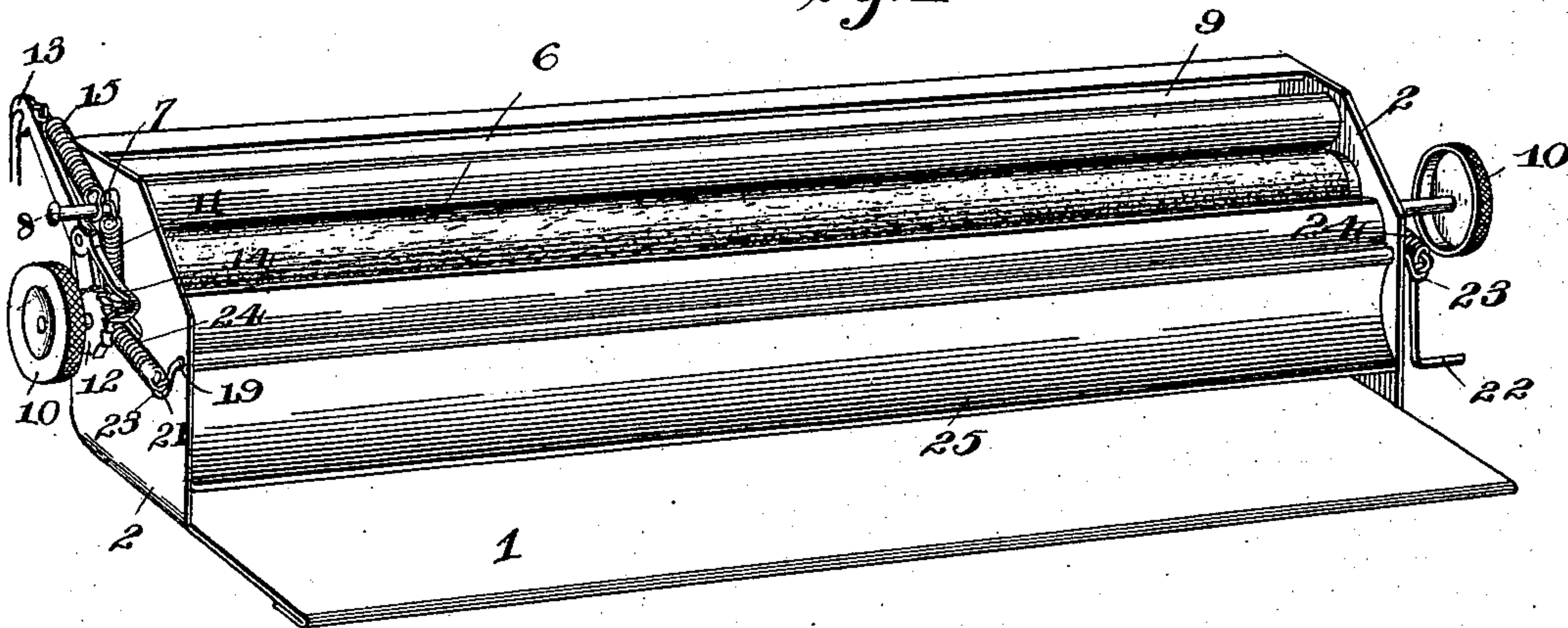


Fig. 2.

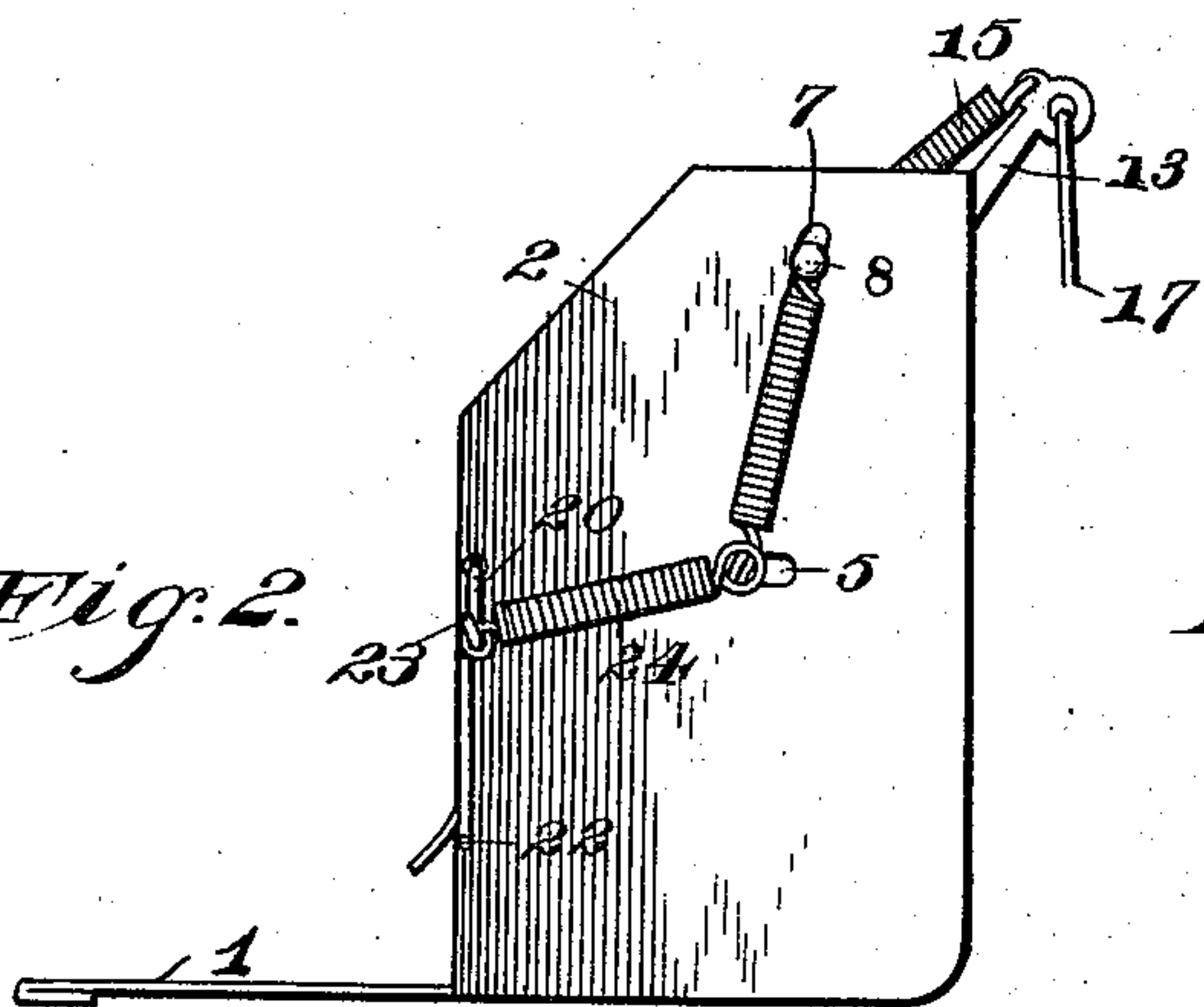


Fig. 3.

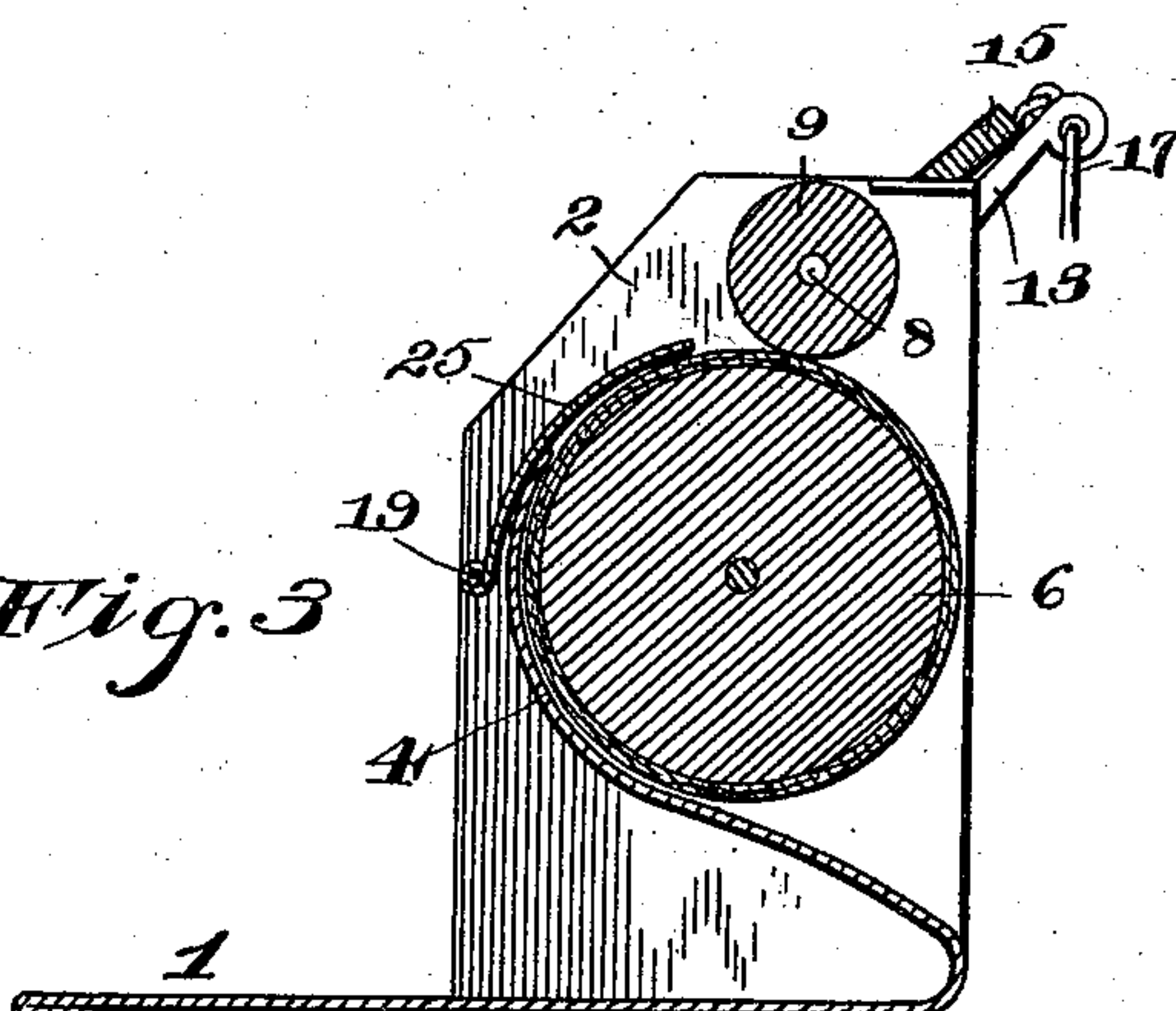
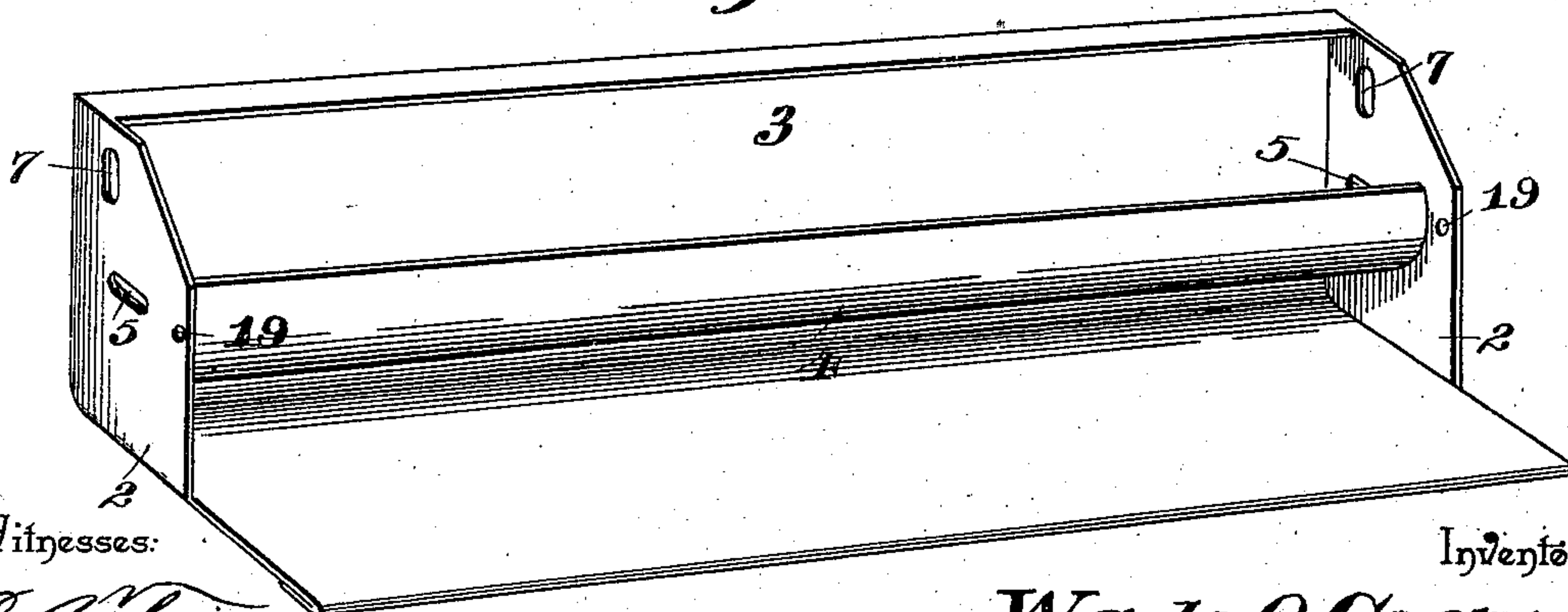


Fig. 4.



Witnesses:

Chas. Ford.

W. S. Duval.

By *his* Attorneys,

Inventor:

Wade O. Crane,

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

WADE O. CRANE, OF SYKESTON, NORTH DAKOTA.

COPY-HOLDER.

SPECIFICATION forming part of Letters Patent No. 504,414, dated September 5, 1893.

Application filed April 27, 1893. Serial No. 472,082. (No model.)

To all whom it may concern:

Be it known that I, WADE O. CRANE, a citizen of the United States, residing at Sykeston, in the county of Wells and State of North Dakota, have invented a new and useful Copy-Holder, of which the following is a specification.

My invention relates to copy-holders, and has special reference to certain new and useful improvements upon the construction of holder illustrated in United States Patent No. 471,101, granted me March 22, 1892.

In the above patent there was illustrated a sheet metal base, the rear edge of which was bent forward upon itself, and above the base curved and connected to opposite standards between which was mounted suitable rolls for retaining the paper or copy, the said curved portion serving to guide the copy to the reading line.

The object of my present invention is to improve upon this construction, or rather, to add to it, and in so doing to provide the same with a guide for directing the paper from the curved portion of the base into the space between the rolls, thereby avoiding the necessity of any manipulation by hand for this purpose, and yet at the same time, not to interfere with the reading space of the machine.

With these objects in view the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a perspective view of the copy-holder provided with my improvements, the attachment being swung down to admit of a reading of the copy. Fig. 2 is an opposite end view with the turning-knob removed. Fig. 3 is a transverse sectional view, the attachment being in the position it occupies when in the act of feeding paper thereto. Fig. 4 is a detail of the copy frame, the rolls, shaft, and other auxiliaries being removed.

Like numerals of reference indicate like parts in all the figures of the drawings.

The base 1, as before, is preferably formed of sheet metal, and has struck up from its ends and between its opposite sides standards 2, which are connected at their rear corners by a transverse strip 3. That portion of the base in rear of the standards is folded over upon

the base and curved to form a stationary guide 4, which is located between and secured to the standards. The standards are provided with a pair of opposite transverse slots 5, in which a frictional roll 6, preferably covered with leather, is mounted, and said standards are further provided with a pair of vertical slots 7, in which a shaft 8 extending beyond the same is located, the said shaft carrying a smaller upper roll 9 which rests upon the friction roll. The shaft of the friction roll is provided beyond the standards with milled knobs 10, and is connected to the ends of the upper shaft by light coiled springs 11. At one end the shaft of the friction roll carries a ratchet-wheel 12 made fast thereon, and loosely mounted upon the shaft is a lever 13 carrying a spring pawl 14 for engaging with the teeth of the ratchet-wheel and drawing said ratchet-wheel around a distance commensurate with the distance of compression given the pawl. The lever is nominally elevated through the medium of a light coiled spring 15, one end of which is connected to one end of the upper shaft, and at its opposite end to the free end of the lever. A wire 17 may depend from the eye in the free end of the lever and be employed to actuate the pawl through the medium of a treadle, hand-pull, or other device.

As thus far described the construction is the same as illustrated, described, and claimed in the patent heretofore referred to, and I will now proceed to describe the disadvantages I overcome and the advantages I secure by my improvement.

It is necessary in the construction of the device heretofore patented to employ one hand of the operator in guiding the leading end of the paper to be copied between the two rolls, that is after the leading end of the paper has become elevated or traveled beyond the upper edge of the fixed guide. To overcome this I provide bearings 19 at the front edges of the standards and journal therein a rock-shaft 20. Each end of the rock-shaft is cranked as at 21, one of the cranks being provided with a bend adapted to serve as a handle 22. The cranks are each further provided with eyes 23, and coiled springs 24 are connected to the eyes and to the shaft of the lower frictional roll. These springs are contract-

ing springs, and naturally draw the frictional roll snugly against the fixed guide and also serve to either hold in an elevated or depressed position, the cranks of the rock-shaft, in accordance with the disposition of said cranks above and below the axis of the shaft. There is carried by the shaft a curved swinging guide 25, the same being designed to form a continuation of the fixed guide of the device and therefore located adjacent to the upper edge thereof. The tension of the coiled spring, it will be seen, serves to maintain the swinging guide either up or down, and when in the upper position it forming a continuation of the lower fixed guide serves without any hand maneuvering upon the part of the operator to guide the leading end of the paper being copied between the meeting faces or peripheries of the two rolls, and on the other hand, when swung to a lowered position it permits of a ready reading of the said paper. It will be understood that the swinging guide is raised only when it is desired to insert the paper, and that as soon as the same has been inserted and its leading end caught between the two rolls the guide is depressed, it being held in either position by the coiled springs, as before stated.

Having described my invention, what I claim is—

1. In a copy-holder, the combination with the opposite standards mounted upon a base, a curved fixed guide located between the standards, of a pair of rolls arranged above the guide the lower roll being in juxtaposition therewith, a rock-shaft journaled in the front edges of the standards adjacent to the upper edge of the lower fixed guide, a curved swinging guide fixed upon the rock-shaft,

cranks at the ends of the rock-shaft, and coiled springs connected to the holder transversely opposite the shaft and to the cranks, whereby the said springs serve to maintain the guide in an open or closed position substantially as specified.

2. In a copy-holder, the combination with the opposite standards having transverse bearing-slots, and a suitable base, of a shaft located therein, a roll carried by the shaft, a shaft and roll arranged thereabove, and a lower curved guide embracing the lower roll, of a rock-shaft journaled in bearings in the front edges of the standards adjacent to the upper edge of the fixed guide, the ends of the rock-shaft being cranked, one of the same terminating in a handle and both having eyes, coiled springs between the eyes and the ends of the roll-carrying shaft, and a curved guide secured to the rock-shaft and terminating adjacent to the point of contact between the rolls, substantially as specified.

3. In a copy-holder, the combination with opposite standards, and a pair of rolls arranged therein, of a guide located below the lower roll, and an upper swinging guide forming a continuation of the lower guide and terminating near the point of contact of the two rolls, and means for retaining in a raised or lowered position said upper guide, substantially as specified.

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

WADE O. CRANE.

Witnesses:

C. V. BROWN,
T. H. O'NEILL.