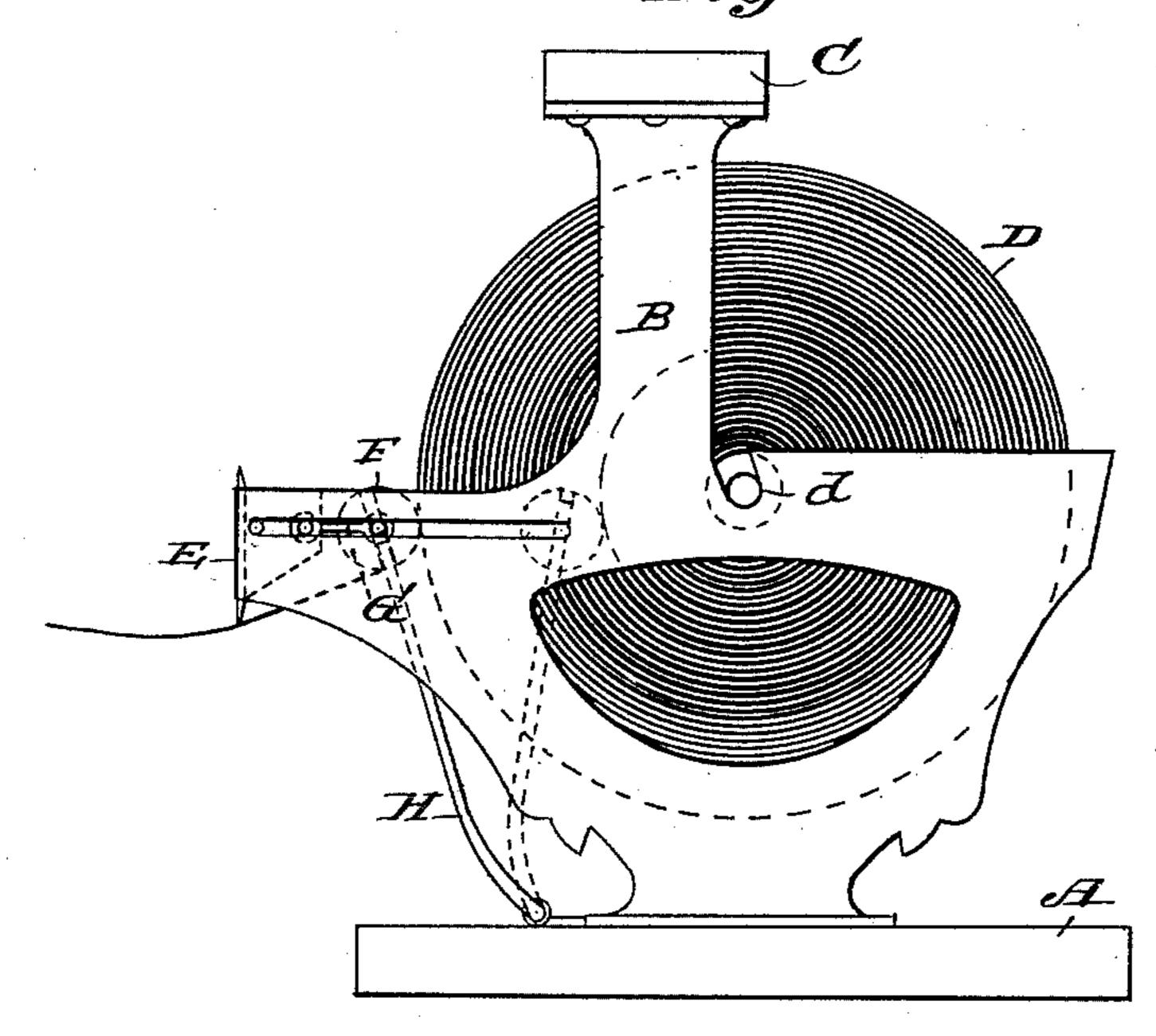
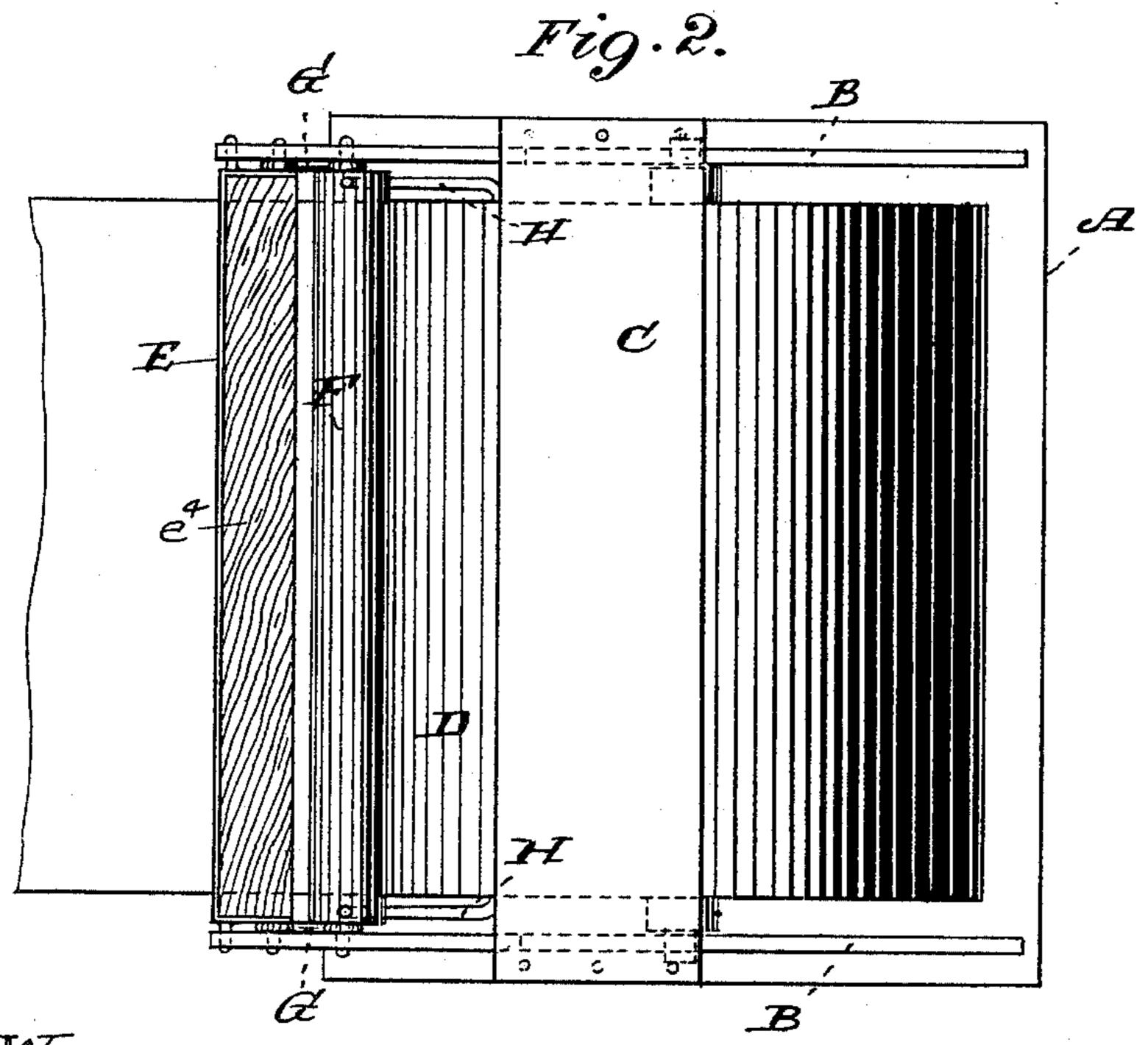
J. A. EASTIN.

PAPER ROLL CUTTER.

No. 394,104.

Fig. Patented Dec. 4, 1888.



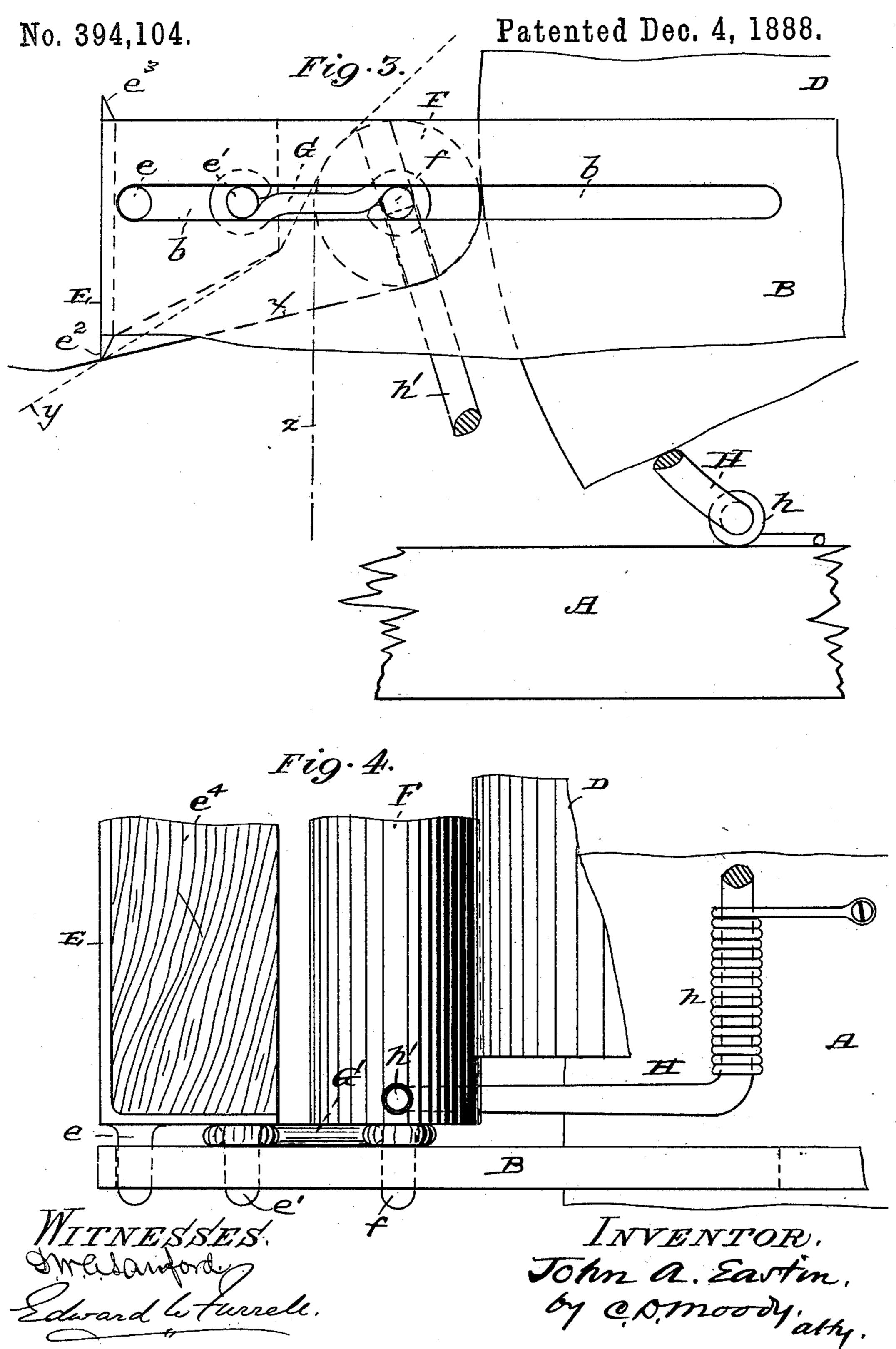


WITNESSES. Edward le turnell Grand and mand.

INVENTOR.
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J. A. EASTIN.

PAPER ROLL CUTTER.



United States Patent Office.

JOHN A. EASTIN, OF ST. LOUIS, MISSOURI, ASSIGNOR OF TWO-THIRDS TO ROBERT E. WILLIAMS AND FRANK HOLTZCLAW, OF SAME PLACE.

ROLL-PAPER CUTTER.

SPECIFICATION forming part of Letters Patent No. 394,104, dated December 4, 1883.

Application filed September 11, 1888. Serial No. 285,121. (No model.)

To all whom it may concern:

Be it known that I, John A. Eastin, of St. Louis, Missouri, have made a new and useful Improvement in Roll-Paper Cutters, of which the following is a full, clear, and exact description.

The improvement relates, mainly, to the method of supporting the knife and obtaining the tension upon the paper web, substantially as is hereinafter set forth and claimed, and illustrated in the annexed drawings, making part of this specification, in which—

Figure 1 is a side elevation of the improved cutter; Fig. 2, a plan; Fig. 3, a detail upon an enlarged scale, it being a side elevation of the parts more immediately connected with the improvement, including the knife, tension-bar, spring, and link; and Fig. 4, a plan of the parts of Fig. 3.

The same letters of reference denote the

same parts.

The frame of the device consists usually of a suitable base, A, uprights B B, and top plate, C. The paper roll D, which is wound 25 upon a roller in the usual manner, is journaled in the bearings d in the uprights, respectively. The knife E and the tension-bar F are separated from each other, and they are both made adjustable toward and from 30 the paper roll—that is to say, the tension-bar F is adapted to bear upon the paper roll and to continue to bear upon it as it diminishes in diameter—and the knife E, which is spaced apart from the paper roll, is so connected with 35 the tension-bar that when the tension-bar moves to keep in contact with the paper roll the knife also moves in the same direction, by which means the tension upon the roll is maintained and the relation of the knife to 40 the paper roll preserved. The most desirable mode of effecting these results is as follows: The knife at its ends respectively is provided with one or more projections in the form, say, of the pins ee'. These pins engage in the 45 slots b in the uprights, respectively, and the knife is thereby adapted to be supported at the proper level, substantially as shown, and to be moved toward and from the position of

the paper roll. By means, say, of a link, G, at each side of the device, which connects at 50 one end with the pin e' of the knife and at the other end with a projection, say, in the form of the pin f in the end of the tensionbar, the knife is so united with the tensionbar as to keep with the tension-bar in its 55 movement. The tension-bar in turn is adapted to press against the paper roll and to move toward it as it diminishes in size by means of the spring H, which at h is suitably secured to the base of the machine, and whose 60 arms h' h' extend and are connected with the tension-bar, substantially as shown, and so as to support the tension-bar and cause it to move toward the paper roll. In the present instance the arms h' are shown penetrating 65 the tension-bar, by which means the tensionbar is, although preferably round, prevented from rotating as the paper roll is unwound.

I desire not to be restricted to the particular means shown for holding and moving the ten-7° sion-bar and knife in the manner described.

The pin f of the tension-bar may extend, as shown, and engage in the slots b in the uprights, and the tension-bar thereby be upheld and be guided in its movement. The paper 75 web may be led from the roll, either under the tension-bar and thence to the knife, as indicated by the broken line x, Fig. 3, or, better still, it can be carried over the tension-bar and thence to the knife, as indicated by the 80 broken line y. This last is preferred, as thereby when the web is released it hangs downward between the knife and roll, as indicated by the broken line z, in a convenient position to be reached.

The knife has the usual cutting-edge, e^2 , and it may also have another cutting-edge, e^3 , Fig. 3. The knife is stiffened by means of the backing e^4 , which is usually of wood. This part also assists in supporting the pins 90 e^4 .

I claim—

1. The combination of the frame, the paper roll D, the knife E, and the tension-bar F, said tension-bar bearing upon the paper roll 95 and said knife being spaced apart from the

paper roll, and said tension-bar and knife both being adjustable toward and from the paper roll, substantially as described.

2. The combination of the frame, the paper roll, the knife, the tension-bar, the links, and the spring, said knife having projections engaging in slots in the uprights, said tension-bar and knife being united by means of said

links, and said spring supporting and moving said tension-bar, substantially as described. 10 Witness my hand.

JOHN A. EASTIN.

Witnesses:

C. D. MOODY,

C. C. Logan.