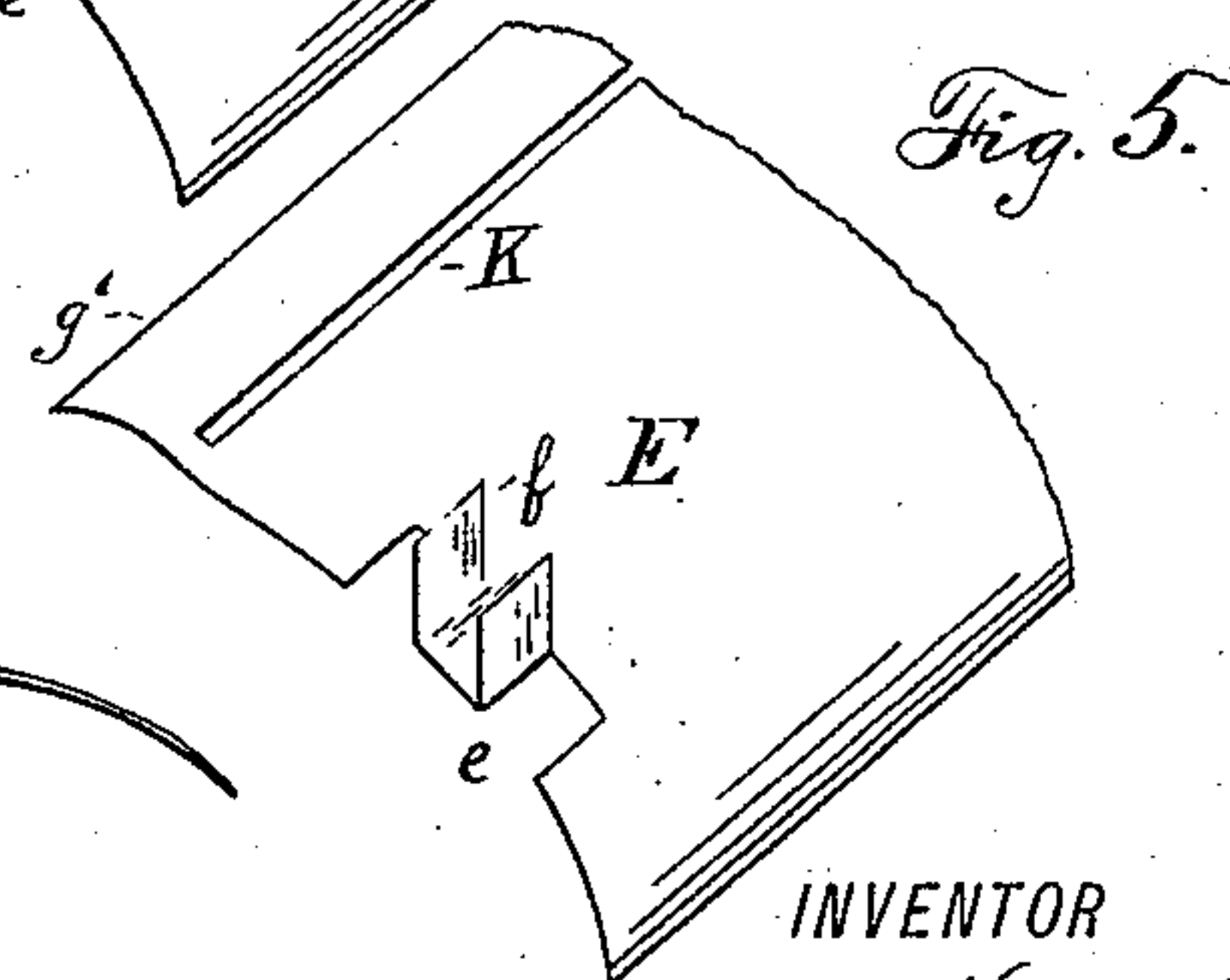
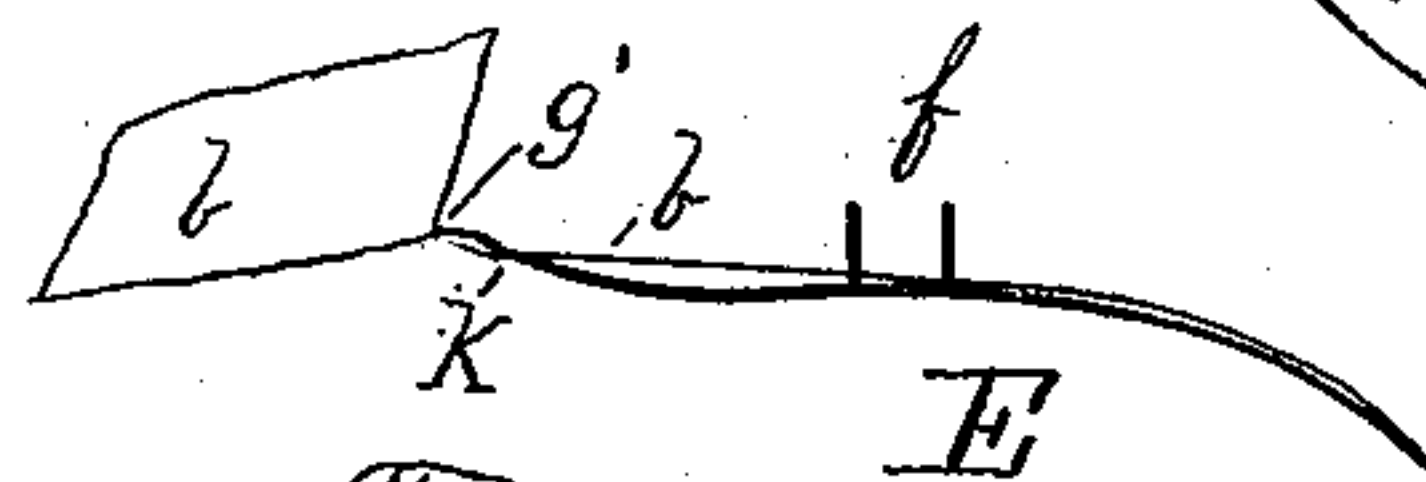
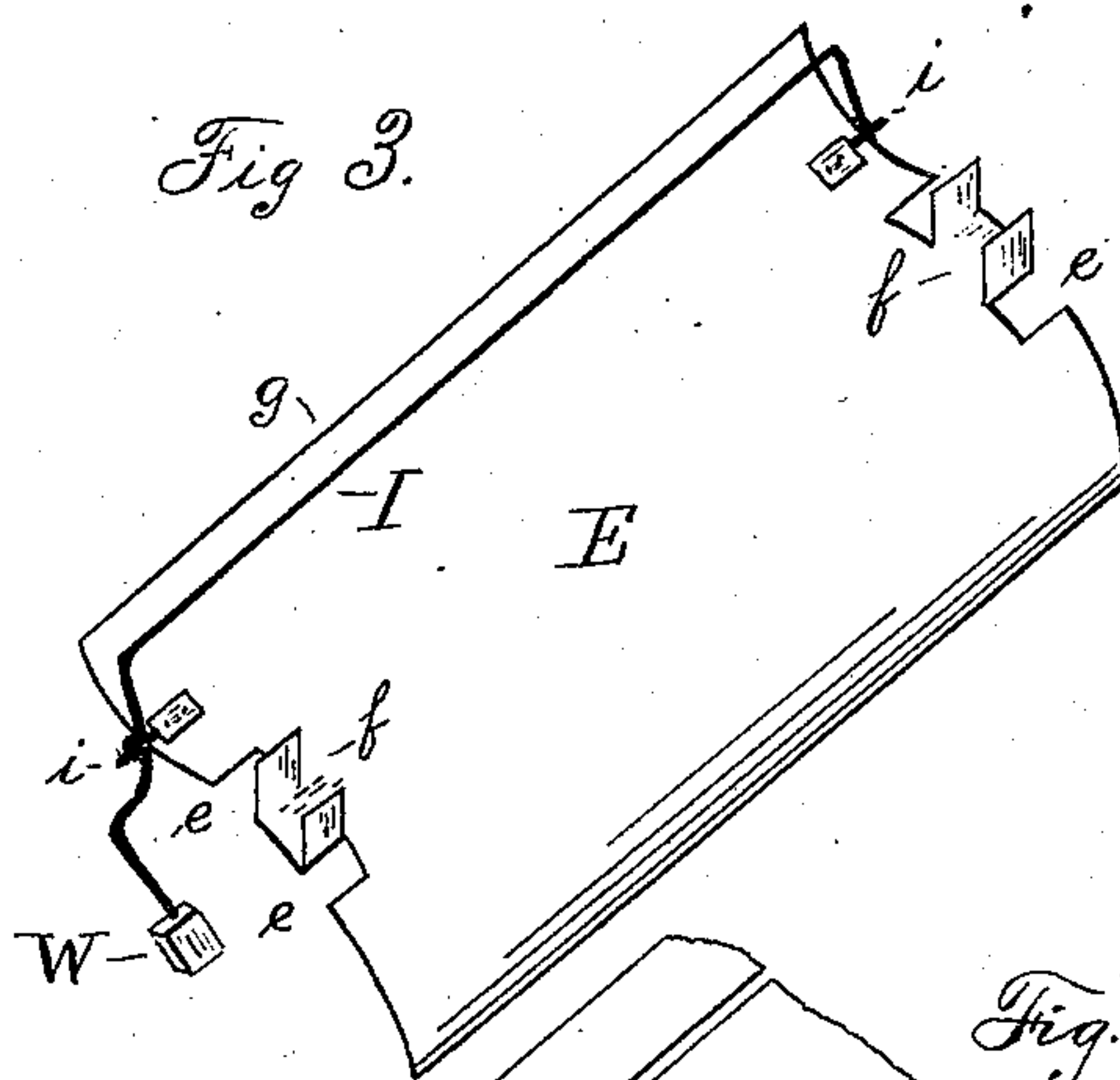
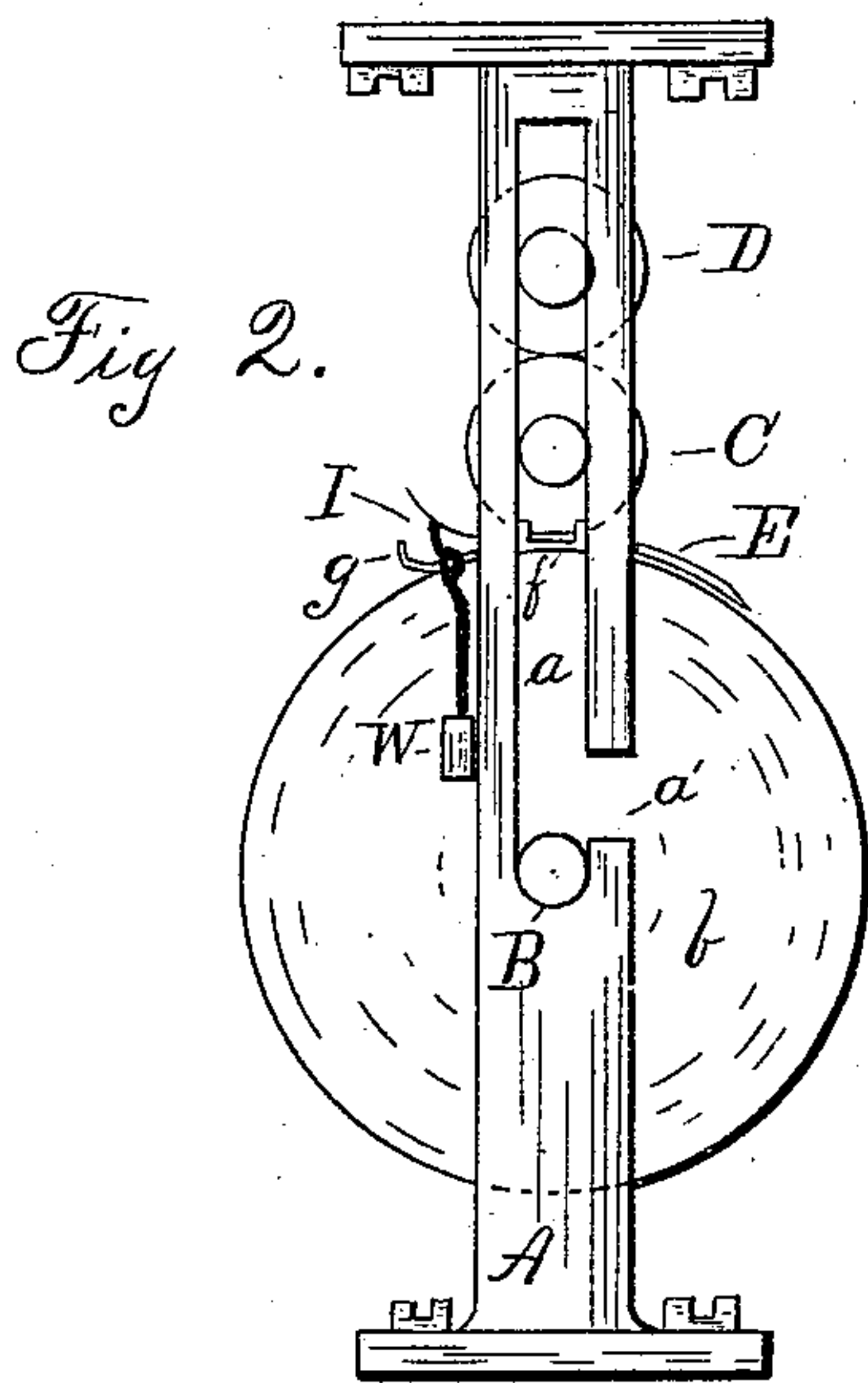
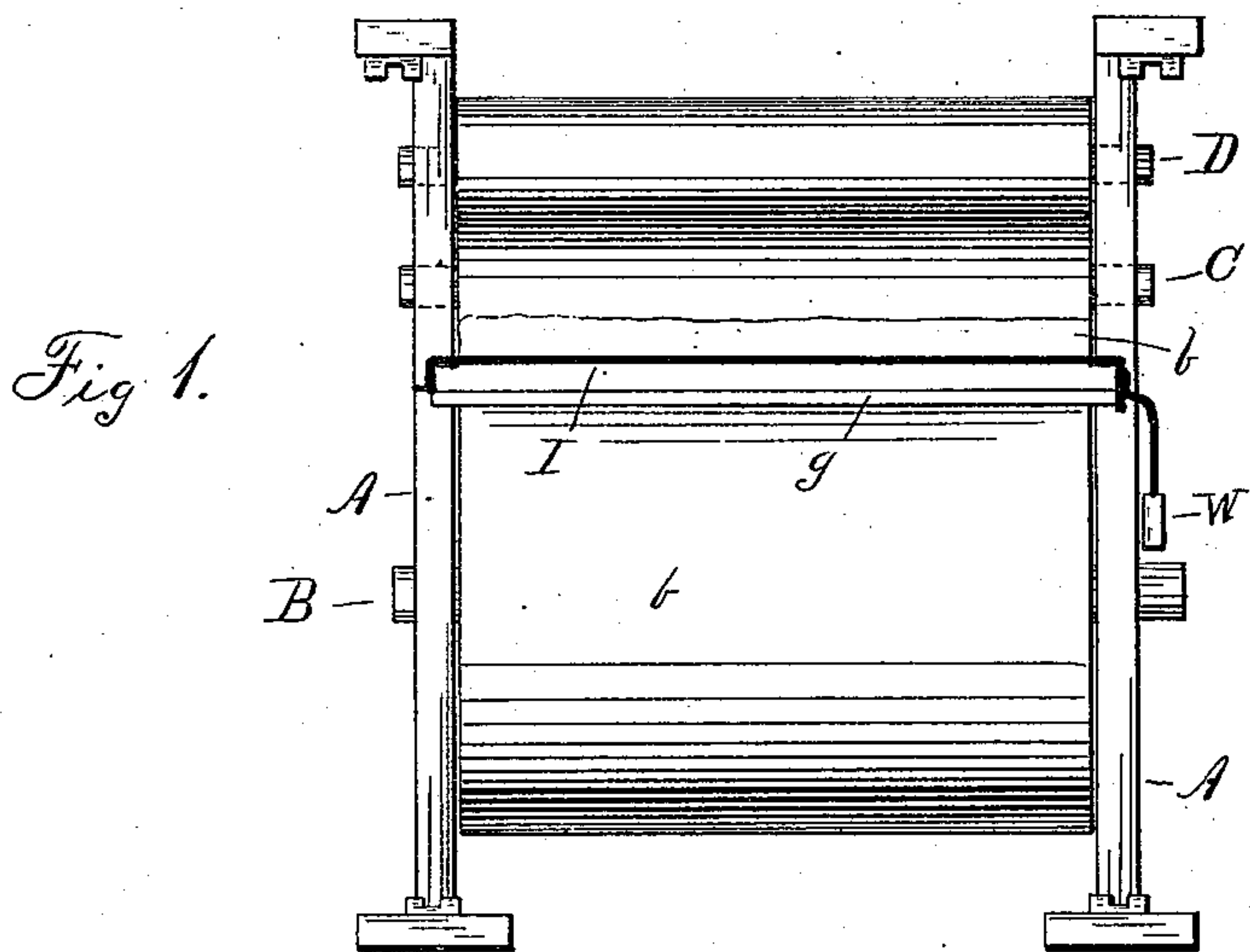


(No Model.)

F. KIRSCH.
ROLL PAPER PRINTER AND CUTTER.

No. 485,701.

Patented Nov. 8, 1892.



WITNESSES:

Albert Willson
Jos. Roy

INVENTOR
Francis Kirsch.
BY
Chas. D. Smith
ATTORNEY.

UNITED STATES PATENT OFFICE.

FRANCIS KIRSCH, OF EAST ST. LOUIS, ILLINOIS.

ROLL-PAPER PRINTER AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 485,701, dated November 8, 1892.

Application filed January 25, 1892. Serial No. 419,236. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS KIRSCH, a citizen of the United States, residing at East St. Louis, in the county of St. Clair and State of Illinois, have invented certain new and useful Improvements in Roll-Paper Printers and Cutters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to roll-paper holders, printers, and cutters as used for wrapping and other purposes; and it consists in a novel arrangement of the rollers and their adjustment in the frame and in the application of a curved plate having a cutting-edge and a paper-lift.

The accompanying drawings illustrate the invention.

Figure 1 is a front elevation; Fig. 2, a side elevation; Fig. 3, a detail in perspective of the curved plate, and Figs. 4 and 5 modifications of the curved plate.

The various parts of the invention are referred to by letters, like letters denoting corresponding parts in the different views.

The letter A indicates the frame of the machine. In each side of the frame is a vertical slot *a*, in which the rollers move, an opening *a'* being provided in one side near the bottom of the slot to admit the end of the roller.

B is a roller bearing the paper *b*. C is a printing-roller of usual construction, and D is an inking-roller to ink the die on roller C. These rollers are placed vertically in order that their weight may be available to print the paper without other pressure.

E is the cutter-plate, formed of sheet metal curved into an χ form. It lies upon the roll of paper *b* under the top layer of the paper and below the printing-roller C. This plate and its attachments has a threefold use. It supplies a solid bed for the printing-roller, so that the impression is clearer than when the yielding mass of paper is immediately beneath the die. Its sharpened edge *g* serves

as a cutter for the paper into suitable lengths, and the lift I, attached thereto, raises the edge of sheet for easy grasping.

The paper-lift *g* is made of wire looped around pins *i i* at each end of the plate *e*. It extends across the plate just back of the edge *g* and is thrown up after each depression, caused by cutting off a sheet, by a little weight *w*, attached to one end of wire below the pin *i*.

The plate E is fitted to the frame and adapted to move vertically by cutting the recesses *e e* at each end and bending up the pieces thus liberated to form guides *f f* to move in the slots *a a* in the frame, the frame-posts occupying the recesses *e e*.

A variation of the curved plate E is shown in profile in Fig. 3 and a portion of the plate in perspective in Fig. 5, in which the lifter I is omitted and the cutting-edge *g'* is inclined downward. In this form of plate the paper *b* passes through the slot K and is torn or cut off by drawing it upward against the edge *g'*. This form of plate may be preferred when the machine is placed low down, as beneath a counter.

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

1. In a roll-paper printer and cutter, a printing-die and a vertically-movable curved plate having a cutting-edge interposed between the roll of paper and its outer layer to serve as a bed-plate for the printing-die, substantially as described.

2. A paper cutter and printer consisting in a frame A, having vertical slots *a a* and opening *a'*, a paper-roller B, printing-roller C, and inking-roller D, working in said slots, a curved plate E, adapted by recesses *e e* and guides *f f* to move vertically in the frame A, a cutting-edge *g* on said plate, and the paper-lifter I, secured to the plate by pins *i i* and held in normal position by a weight *w*, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS KIRSCH.

Witnesses:

WALTER E. BECKWITH,
A. M. BECKWITH.