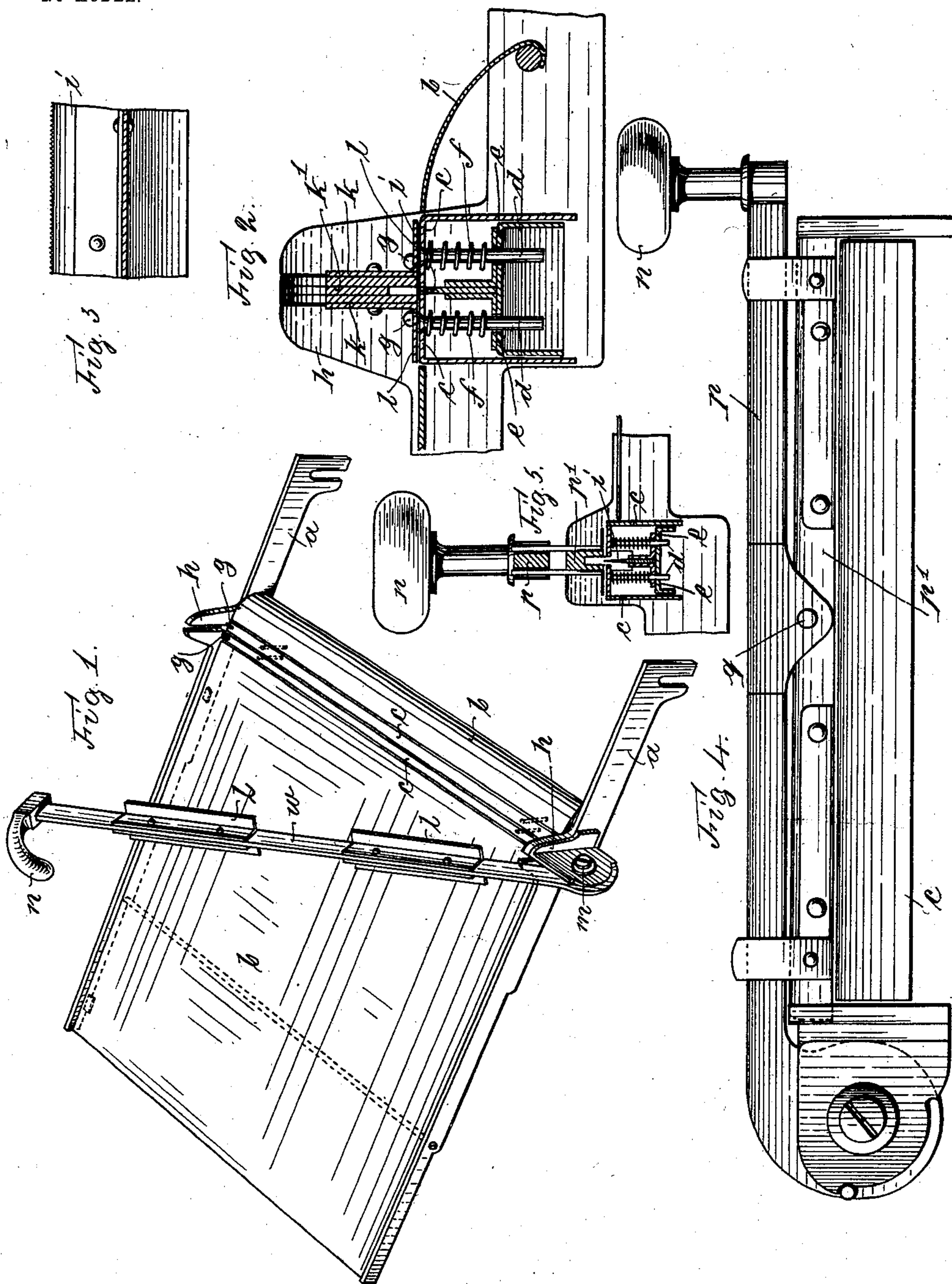


No. 744,637.

PATENTED NOV. 17, 1903.

F. SOENNECKEN.
PAPER CUTTING DEVICE.
APPLICATION FILED DEC. 2, 1901.

NO MODEL.



Witnesses
Emil Hansen.
Arthur Scholz.

Inventor
Friedrich Soennecken.
by
Herbert Ripper.
Attorney

UNITED STATES PATENT OFFICE.

FRIEDRICH SOENNECKEN, OF BONN, GERMANY.

PAPER-CUTTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 744,637, dated November 17, 1903.

Application filed December 2, 1901. Serial No. 84,473. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH SOENNECKEN, a subject of the King of Prussia, German Emperor, and a resident of Bonn-on-the-Rhine, in the Province of the Rhine, German Empire, have invented certain new and useful Improvements in Paper-Cutting Devices, of which the following is an exact specification.

My invention relates to a device for cutting paper, especially for cutting paper-rolls into sheets. In the devices hitherto used for this purpose it was a great disadvantage that the knives easily got blunt on account of the paper always sliding over the cutting edge of the same. It also often happened that the cutting edge on account of its lying perfectly free easily got notched, and the paper in consequence thereof was torn. In order to do away with this disadvantage, I provide my new construction, which is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the device. Fig. 2 is a vertical section of part of the same. Fig. 3 shows the construction of the knife. Fig. 4 shows a modification of the construction shown in Figs. 1 and 2. Fig. 5 is a vertical section of this modification.

a is the frame of the device, in which frame a plate *b* is fixed. In this plate *b* two rails *c* are situated, which rails consist of angle-iron, the vertical sides of which serve for guiding the same.

To the horizontal sides of the rail *c* pins *d* are fixed, which pins are guided in holes provided in a plate *e*, situated between the vertical sides of the rails *c*. Around the pins *d* spiral springs *f* are provided, which tend to press the rails *c* upward. The upward motion of the rails *c* is stopped by the pins *g*, fixed in the parts *h* of the frame *a*.

The knife *i* for cutting the paper is fixed upon the plate *e*, as shown in Figs. 2 and 5. Advantageously the upper edge of the knife is serrated, as shown in Fig. 3. Above the knife *i*, a one-armed lever *w* is situated, which is pivoted at *m* and the free end of which is provided with a handle *n*. The lever *w* consists of two rails *k*, between which a rail *k'* is

situated. The three rails are connected to each other by means of screws, rivets, or the like in that way that between the rails *k* *k'* a groove is formed for receiving the cutting edge of the knife. To the outside of the rails *k* angle-iron pieces *l* are fixed.

The operation of the apparatus is as follows: The paper to be cut is brought upon the plate *b* so that the cutting-line is situated vertically above the knife *i* wherever the lever *w* is pressed downward. The horizontal sides of the angle-irons *l* press upon the rails *c*, so that the paper is held fast between the lower surface of the angle-irons *l* and the upper surface of the rails *c*. Now in case the lever *w* is still further pressed down the paper is pressed upon the knife and cut in consequence thereof.

In the construction described above the cutting of the paper begins near the pivot *m* of the lever *w* and gradually advances toward the free end of the same. This has the disadvantage that the cutting of the paper begins before the whole paper is held fast between the angle-iron pieces *l* and the rails *c*—that is to say, the cutting begins on one end of the lever *w* before the other end of the same is pressed upon the paper. In order to do away with this disadvantage and to hold the paper equally fast in all points before the cutting of the same begins, the following arrangement (shown in Figs. 4 and 5 of the drawings) is provided: The lever for pressing the paper down consists of two parts *p* and *p'*, connected to each other by means of a bolt *q*. The lower part *p'* is constructed in the same way as the lever *w* in the construction described above. By this lower part *p'* being pivoted at *q* this part in pressing the lever downward will lie down equally upon the paper, so that the whole paper is equally held fast before the cutting of the same takes place.

Having thus fully described the nature of my invention, what I desire to secure by Letters Patent of the United States is—

In a paper-cutting device, the combination of a flat table for taking up the paper to be cut, a knife *i* situated at one end of this ta-

ble, rails *c* arranged on the sides of the knife, springs *f* for pressing the rails *c* upward, a rail provided with a groove for taking up the cutting edge of the knife *i*, and a handle *n* 5 for swinging said rail upward around a pivot situated at one side of the table, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

FRIEDRICH SOENNECKEN.

Witnesses:

CHARLES L. SIMPLE,
CARL SCHMITT.