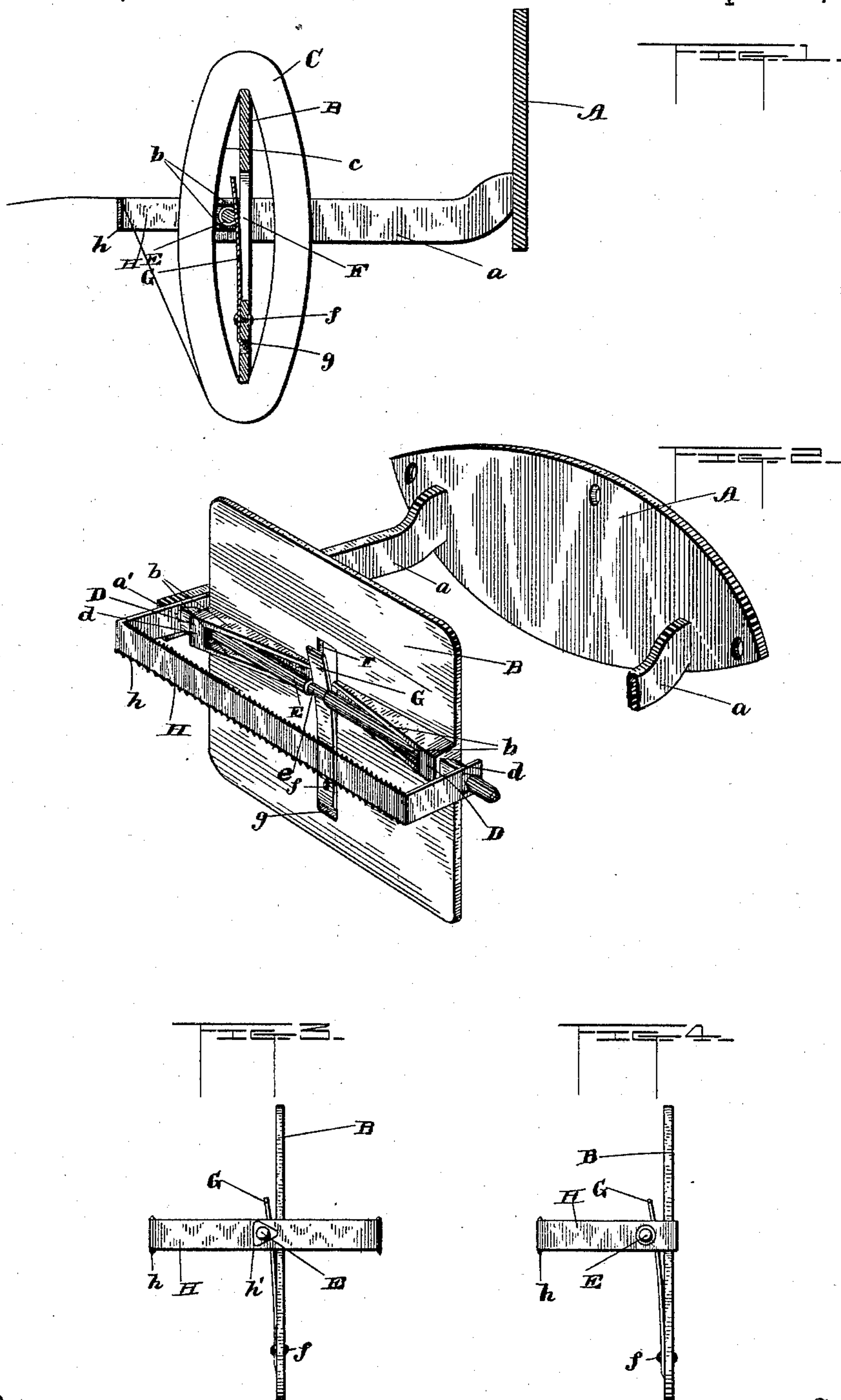


(No Model.)

C. R. WILLIAMSON.  
ROLL PAPER CUTTER.

No. 426,578.

Patented Apr. 29, 1890.



Witnesses  
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# UNITED STATES PATENT OFFICE.

CHARLES R. WILLIAMSON, OF TOPEKA, KANSAS.

## ROLL-PAPER CUTTER.

SPECIFICATION forming part of Letters Patent No. 426,578, dated April 29, 1890.

Application filed June 14, 1889. Serial No. 314,263. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES R. WILLIAMSON, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Roll-Paper Cutters; and I do hereby 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.

My invention relates to an improvement in paper-cutters, and more particularly to that class of paper-cutters which are adapted to operate in connection with a roll of paper supported so as to be turned upon an axis as the paper is drawn from the outside of the roll; and in the present instance my improvement relates to a low support and cutter adapted for use in connection with a roll of paper oblong or oval in cross-section.

The object is to provide simple and effective means for locking the roll of paper in position to turn and at the same time securing a knife or cutter-bar in such relation to the holder that it will sever the desired length of paper from the roll as the same is drawn off therefrom.

With these ends in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a vertical transverse section through the roll, the core-piece, and cutter-bar, showing the paper in engagement with the edge of the knife as it appears when about to be severed. Fig. 2 is a view of the core-piece and cutter, the roll being removed. Fig. 3 is an end view of the core-piece and cutter, the cutter here being shown as a double cutter; and Fig. 4 is a view in detail, showing the cutter mounted loosely on the core-piece.

A represents a base-plate, from which project a pair of standards *a*, between which the roll of paper is intended to be supported. In the present instance I have shown the base-plate of oval form and standards projecting therefrom in such a manner that the plate may be fastened to the wall with the standards projecting laterally therefrom, or the plate may rest flat upon a table or other desired

support and the standards projecting upwardly therefrom, as may be desired. Through the outer or upper ends of the standards *a* perforations *a'* are formed, in which the ends of the supporting-spindle are loosely engaged.

The support for the paper roll consists of a flat core-plate B, of such dimensions as to be readily inserted within the flattened core *c* of the roll of paper C. Centrally along one side the plate B is provided with a channel formed by ribs *b*, which increase gradually in height from near the middle of the plate toward its ends, the said channel being filled at the ends of the plate, forming boxes D, through which the supporting-spindle E is allowed a free longitudinally-sliding movement. The said boxes D project slightly beyond the ends of the plate, forming seats *d* for the reception of the cutter-bar. The said seats *d* may either be angular in cross-section, as shown in Figs. 2 and 3, and adapted to carry the cutter-bar positively with the plate in its movement on the spindle or with the spindle, or they may be circular in cross-section, as shown in Fig. 4, and permit the cutter-bar to turn thereon within certain limits independently of the plate B. The plate B is also provided with a central slot F, extending transversely thereof, and a plate-spring of tongue form G is secured to the plate at one end of the slot and extends thence partly across the plate over the said slot, and when in normal position rests above or outwardly from the surface of the plate B. The end of the spring G is conveniently secured to the plate by passing its end through a narrow opening *g* in the plate and then riveting the spring a short distance above its end firmly to the face of the plate, as shown at *f*. The spring when thus secured is in such position that its free end may be pressed back into the slot F to a position flush with or below the channel-surface of the plate.

The supporting-spindle E consists of a plain round piece of wire or rod having its ends rounded for convenience in inserting them and having at its center, or at the portion which is adapted to rest opposite the spring G, an annular recess *e*, sufficiently wide to receive the spring G therein. The normal position of the spring is such that when the spindle is inserted in its position



within the boxes and channel of the plate B the spring will press against the recessed portion of the spindle, and thereby effectually prevent its longitudinal displacement. At 5 the same time it will be observed that by pressing the spring back into the slot F the spindle will be released and will be free to be withdrawn from the plate B and standards *a*.

The cutter-bar consists of a strip of metal 10 H, provided with cutting-edges *h*, preferably saw-teeth edges, and having its ends bent or turned at right angles thereto and provided with openings *h'*, adapted to receive the seats *d* on the plate B. It is intended to construct 15 the cutter-bar of such material that its ends may be sprung over the seats *d*. A single cutter-bar is shown in Figs. 1 and 2, while in Fig. 3 a double cutter-bar is shown, the two halves extending to positions on the roll diametrically opposite each other, so that for each revolution of the roll there will be two cuts made 20 instead of one. This would be of advantage in connection with large rolls; but in connection with the ordinary rolls of toilet-paper a single cutter-bar would be sufficient. 25

The cutter as thus constructed is very simple, does its work effectively, the roll cannot be removed from its base by accident, and the device complete can be furnished at a very 30 low cost.

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

1. In combination, a support, a core-piece, a 35 cutter-bar attached to said core-piece, a removable spindle extending through boxes at the end of the core-plate and engaged with said support, and means for locking the spindle in

position in the support, substantially as set forth. 40

2. In combination, a support, a core-piece engaged therewith, a cutter-bar attached to said core-piece, a spindle extending through boxes in the core-plate, and an automatic locking device to hold the spindle in position, substantially as set forth. 45

3. In combination, a core-piece provided with a channel along its face, boxes at the ends of the channel, and seats for the cutter-bar projecting from the ends of the boxes, a 50 cutter-bar, a spindle extending through said boxes and along the channel on the core-piece, and a locking device to hold the spindle in position, substantially as set forth.

4. In combination, a support, a core-piece, a 55 cutter-bar attached to the core-piece, a spindle extending along the face of the core-piece and through boxes at the end thereof, and a spring having a normal engagement with the spindle to lock it in position, substantially as 60 set forth.

5. In combination, a support, a core-piece, a spindle adapted to secure the core-piece to the base and permit a free revolution of the roll and its core-piece, a cutter-bar attached to the 65 core-piece, a recess in the spindle, and a spring secured to the core-piece and adapted to rest normally in the recess in the spindle to prevent its displacement, substantially as set forth. 70

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

CHARLES R. WILLIAMSON.

Witnesses:

BESSIE E. YOUNG,  
ELLA MULLALLY.