

No. 786,606.

PATENTED APR. 4, 1905.

G. SCHWARZ & G. LOWE.

CUTTING STICK.

APPLICATION FILED NOV. 25, 1904.

Fig. 1.

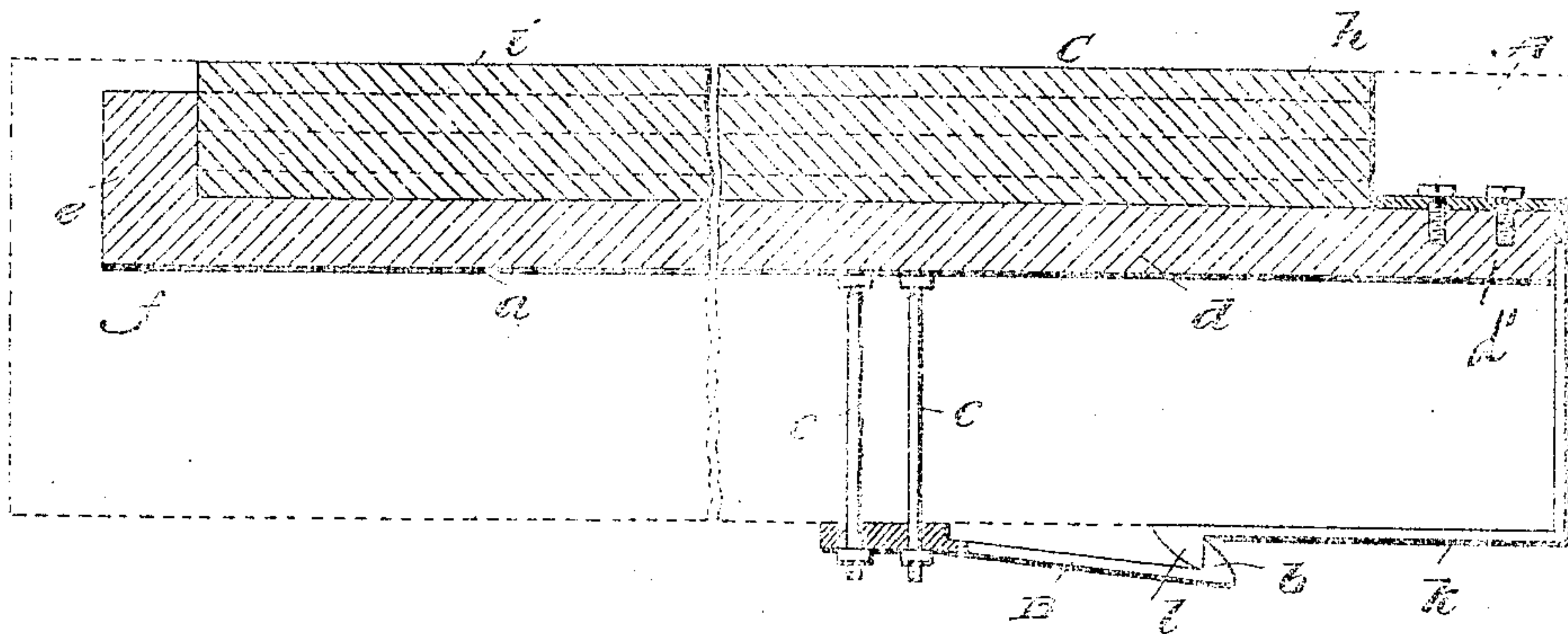


Fig. 2.

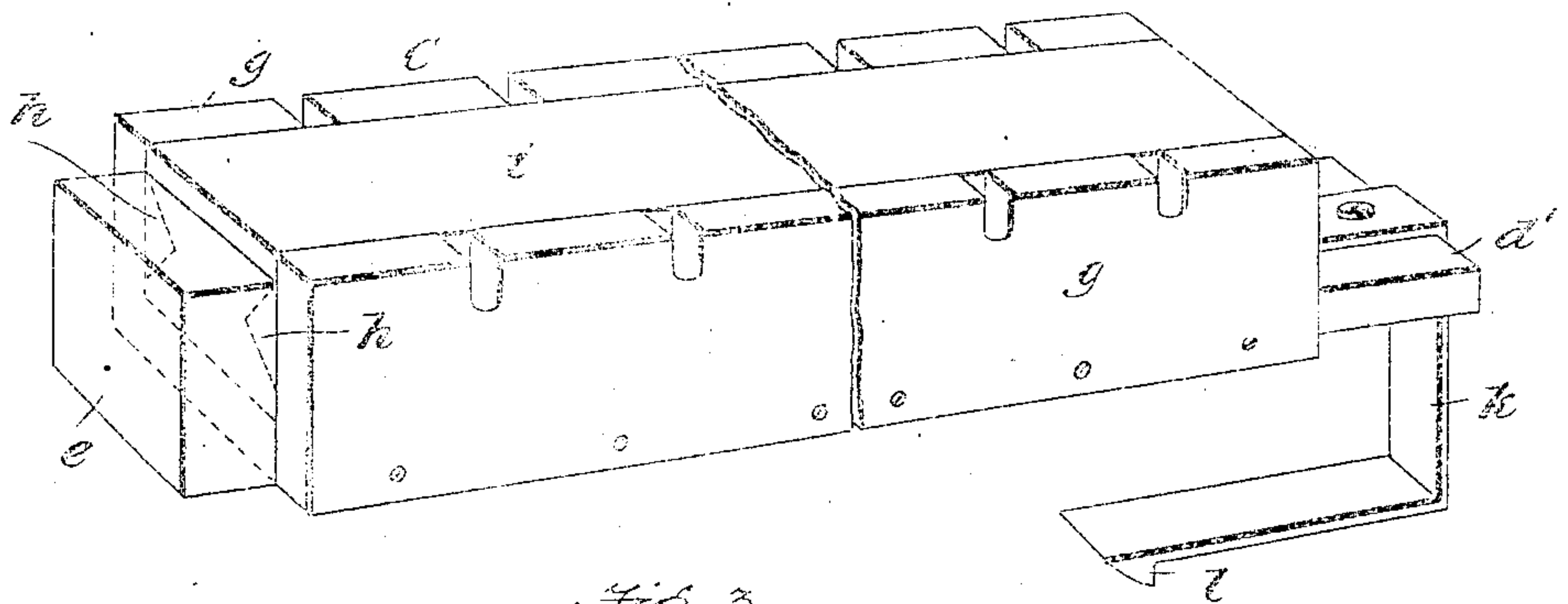


Fig. 3.

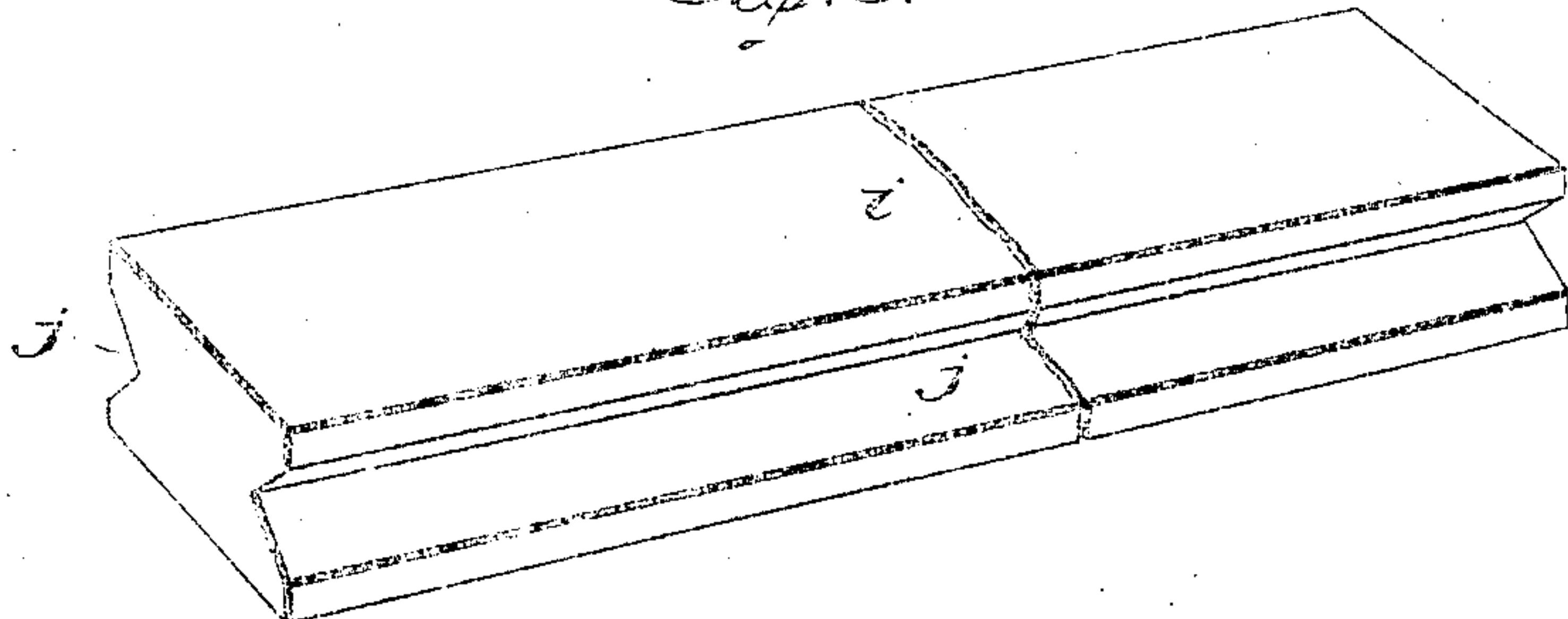
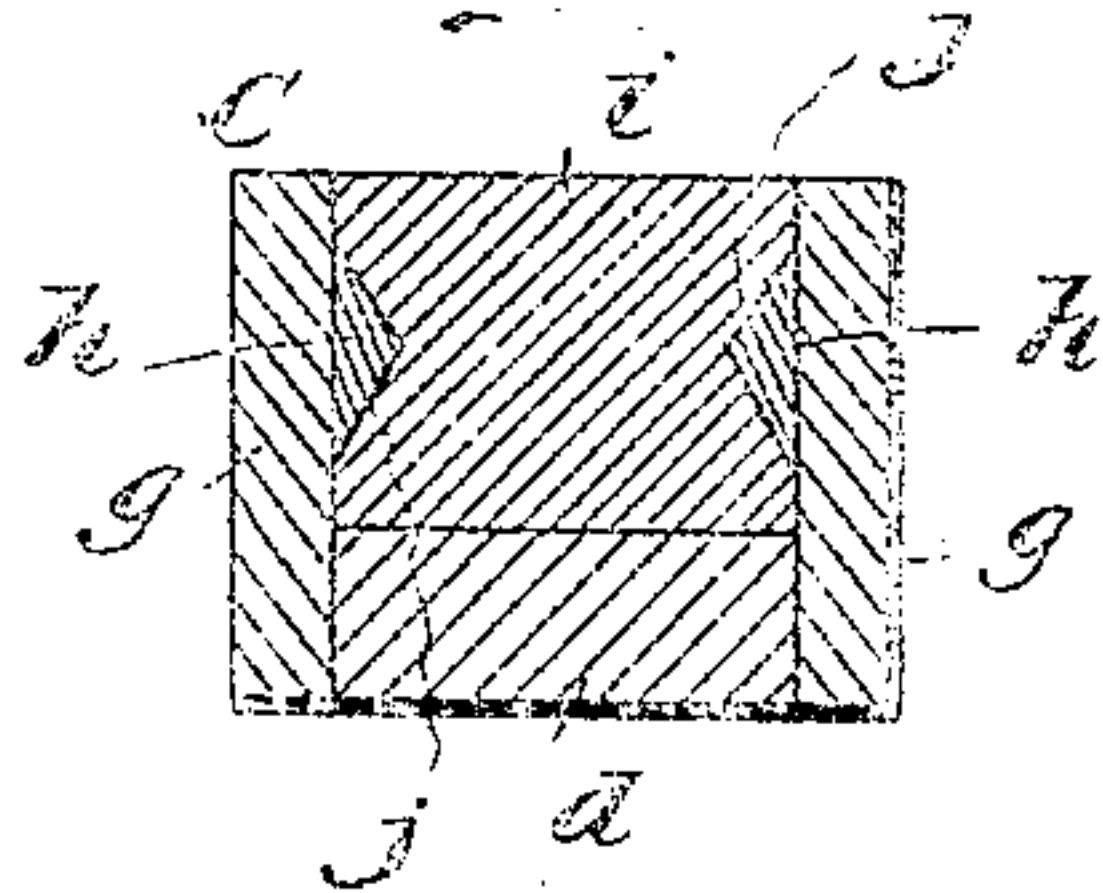


Fig. 4.



Witnesses

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# UNITED STATES PATENT OFFICE.

GEORGE SCHWARZ, OF BROOKLYN, NEW YORK, AND GEORGE LOWE, OF JERSEY CITY, NEW JERSEY.

## CUTTING-STICK.

SPECIFICATION forming part of Letters Patent No. 786,606, dated April 4, 1905.

Application filed November 25, 1904. Serial No. 234,315.

*To all whom it may concern:*

Be it known that we, GEORGE SCHWARZ, residing at Brooklyn, in the county of Kings and State of New York, and GEORGE LOWE, residing at Jersey City, in the county of Hudson and State of New Jersey, citizens of the United States, have invented new and useful Improvements in Cutting-Sticks, of which the following is a specification.

Our invention pertains to a cutting-stick—*i. e.*, a stick designed to be carried by one of the cutting-rollers of a web-printing press, so as to support a web of paper and receive the cutting edge of a knife on a complementary cutting-roller, with a view of enabling the said knife to make a clean cut; and it has for one of its objects to provide a cutting-stick and means coacting with the cutting-stick whereby the stick may be quickly and easily connected to its roller and as expeditiously disconnected and removed therefrom when necessity demands.

Another object of the invention is the provision of a cutting-stick embodying such a construction that the necessity of employing nails or the like to connect the cushion to a backing-bar is obviated, this being advantageous, since it renders feasible the employment of an economical composition cushion and also because it permits of the cushion being readily connected to and disconnected from the backing-bar.

Another object is to provide a cutting-stick the cushion of which may be conveniently reversed and its usefulness thereby materially prolonged.

With the foregoing in mind the invention will be fully understood from the following description and claims when taken in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal sectional view, partly in dotted lines, illustrating one of the two cutting-rollers of a web-printing press and the cutting-stick constituting the present embodiment of our invention in proper position in said roller. Fig. 2 is a perspective view of the cutting-stick *per se* removed.

Fig. 3 is a similar view of the cushion removed from the stick, and Fig. 4 is a transverse section taken through the stick.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A (see dotted lines in Fig. 1) is one of the cutting-rollers of a web-printing press, in the perimeter of which the usual longitudinal channel *a* is provided.

B is a resilient keeper having a beveled head *b*, the said keeper being disposed at the inner side of the thickness of the hollow roller and connected to the same through the medium of bolts *c* or other suitable means, and C is my novel stick as a whole, which stick is of a shape and size to rest in the channel *a* of the roller A. The said stick comprises a backing-bar *d*, preferably of wood, having a head *e* at one end designed to take into a complementary socket *f* in the roller A, side bars *g*, fixed with respect to the backing-bar *d* and having longitudinal ribs *h* on their inner sides, a cushion *i*, preferably of inexpensive composition, removably arranged in the holder formed by the bars *d* and *g* and having correspondingly-shaped grooves *j* in its opposite sides to receive the ribs *h* of bars *g*, and a resilient latch *k*, connected to an extended end *d'* of the backing-bar *d*, shaped to straddle the end of the thickness of the roller A and terminating in an arm having a beveled head *l* arranged to engage the head *b* of the keeper B.

In virtue of the construction described it will be observed that when the cutting-stick is slid endwise into the channel *a* of the roller A the head *l* of latch *k* will spring into engagement with the head *b* of the keeper B, and thereby securely fasten the cutting-stick in the roller, also that when it is desired to remove the cutting-stick from the roller the pressman has but to press the head *b* of keeper B out of engagement with the head *l* of latch *k* and draw the cutting-stick endwise from the channel *a*. The expedition with which the cutting-stick may be secured in and detached from the roller A will be appreciated as an important advantage when it is remembered



that the cutting-stick can only be removed from and placed in the roller A while the press is idle.

The manner described of securing the cushion *i* in the holder—*i. e.*, through the medium of the coacting grooves *j* and ribs *h*—is materially advantageous because it obviates the necessity of using nails or the like to secure the cushion in the holder, this rendering it feasible to make the cushion of a composition much cheaper than rubber, because it permits of the cushion being readily reversed, so as to present a fresh surface to the knife, which materially prolongs the usefulness of the cushion, and because it adapts the cushion to be quickly and easily removed from the holder and as readily replaced with a new cushion when necessary.

It will be gathered from the foregoing that our novel cutting-stick as a whole is adapted to be placed and secured in a cutting-roller and disconnected and removed therefrom and that the cushion is adapted to be secured in and removed from the holder without entailing the employment of tools of any kind. It will also be gathered that the cutting-stick is simple, compact, and inexpensive and embodies no delicate parts, such as are likely to get out of order after a short period of use.

We have specifically described the construction and relative arrangement of the parts embraced in the present and preferred embodiment of our invention in order to impart a full, clear, and exact understanding of the said embodiment. We do not desire, however, to be understood as confining ourselves to the said specific construction and relative arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of our invention as claimed.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination of a cutting-roller having a longitudinal channel in its perimeter extending to one of its ends, a cutting-stick arranged in said channel and removable endwise therefrom, means on the roller, and means on the cutter-stick arranged to engage the first-mentioned means when the cutter-stick is shoved home and coact with said means to hold the cutter-stick against casual endwise movement.

2. The combination of a cutting-roller having a longitudinal channel in its perimeter extending to one of its ends, a cutting-stick arranged in said channel and removable endwise therefrom, said cutting-stick comprising a

holder open at one end and having a backing-bar and side bars provided with longitudinal ribs, and a cushion removable endwise from the holder and having longitudinal grooves disposed midway between its opposite faces and receiving the ribs of the holder, means on the roller, and means on the holder of the cutter-stick arranged to engage the first-mentioned means when the cutter-stick is shoved home and coact with said means to hold the cutter-stick against casual endwise movement.

3. The combination of a cutting-roller having a longitudinal channel in its perimeter extending to one of its ends and also having a socket at the opposite end of said channel, a cutting-stick arranged in said channel and removable endwise therefrom; said cutting-stick comprising a holder open at one end and having a head at its opposite end disposed in the socket of the roller, a cushion removable endwise from the holder, and coacting means on the holder and cushion for holding the latter against lateral movement from the former, means on the roller, and means on the cutter-stick arranged to engage the first-mentioned means when the cutter-stick is shoved home and coact with said means to hold the cutter-stick against casual endwise movement.

4. The combination of a cutting-roller having a longitudinal channel in its perimeter, and also having a beveled keeper at the inner side of its thickness, and a cutting-stick removably arranged in the channel of the roller and having a latch arranged to engage the keeper on the roller.

5. The combination of a cutting-roller, a cutting-stick carried thereby, and a fastener comprising members on the roller and stick; one of the said members being arranged and adapted to be sprung into and out of engagement with the other.

6. The combination of a cutting-roller having a longitudinal channel in its perimeter, a resilient keeper carried by the roller at the inner side of the thickness thereof and having a beveled head, and a cutting-stick removably arranged in the channel of the roller and having a resilient latch provided with a beveled head arranged to engage that of the keeper.

In testimony whereof we have hereto set our hands in presence of two subscribing witnesses.

GEORGE SCHWARZ.  
GEORGE LOWE.

Witnesses:

RICHARD SCHWARZ,  
FRED. STACY.