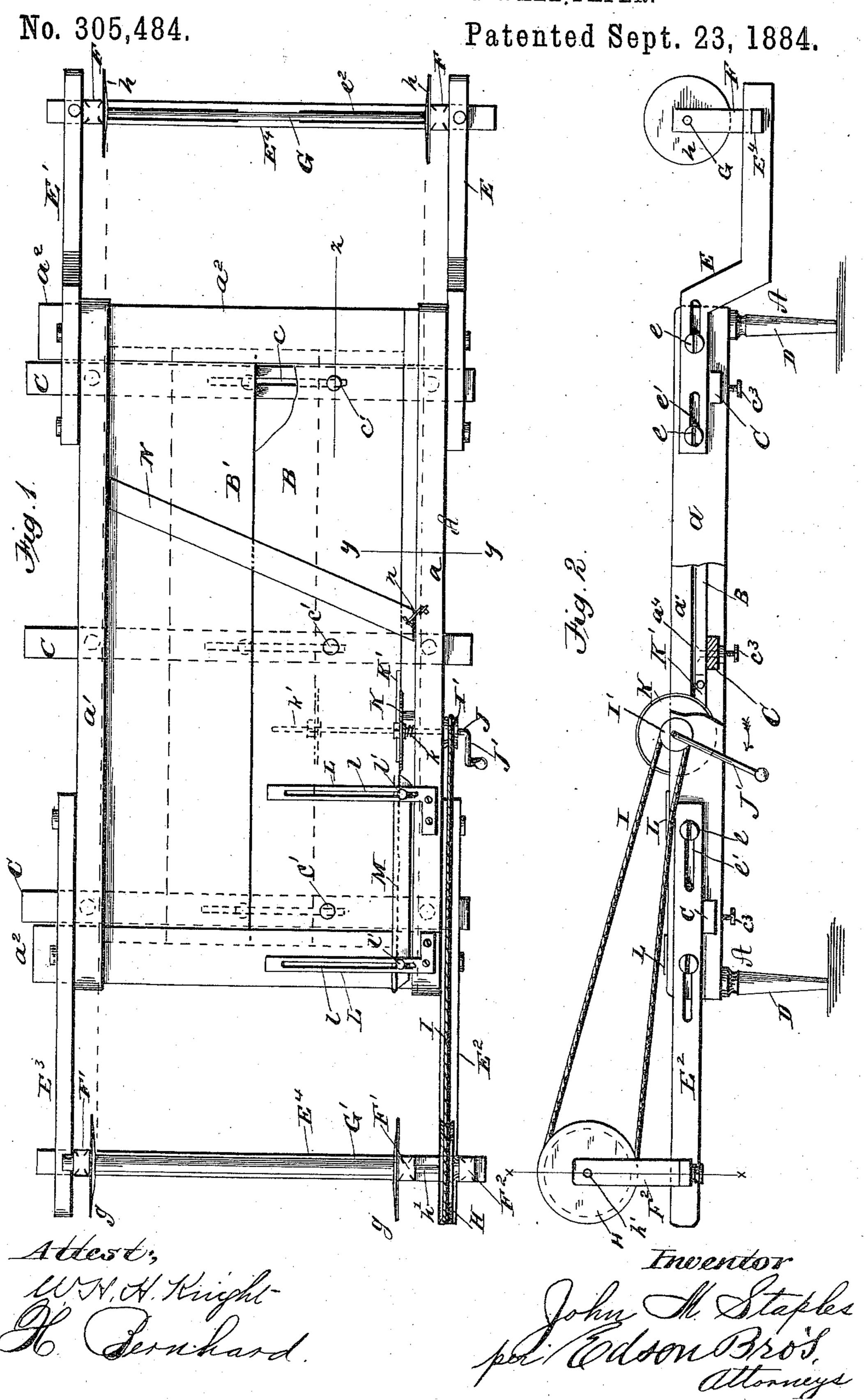
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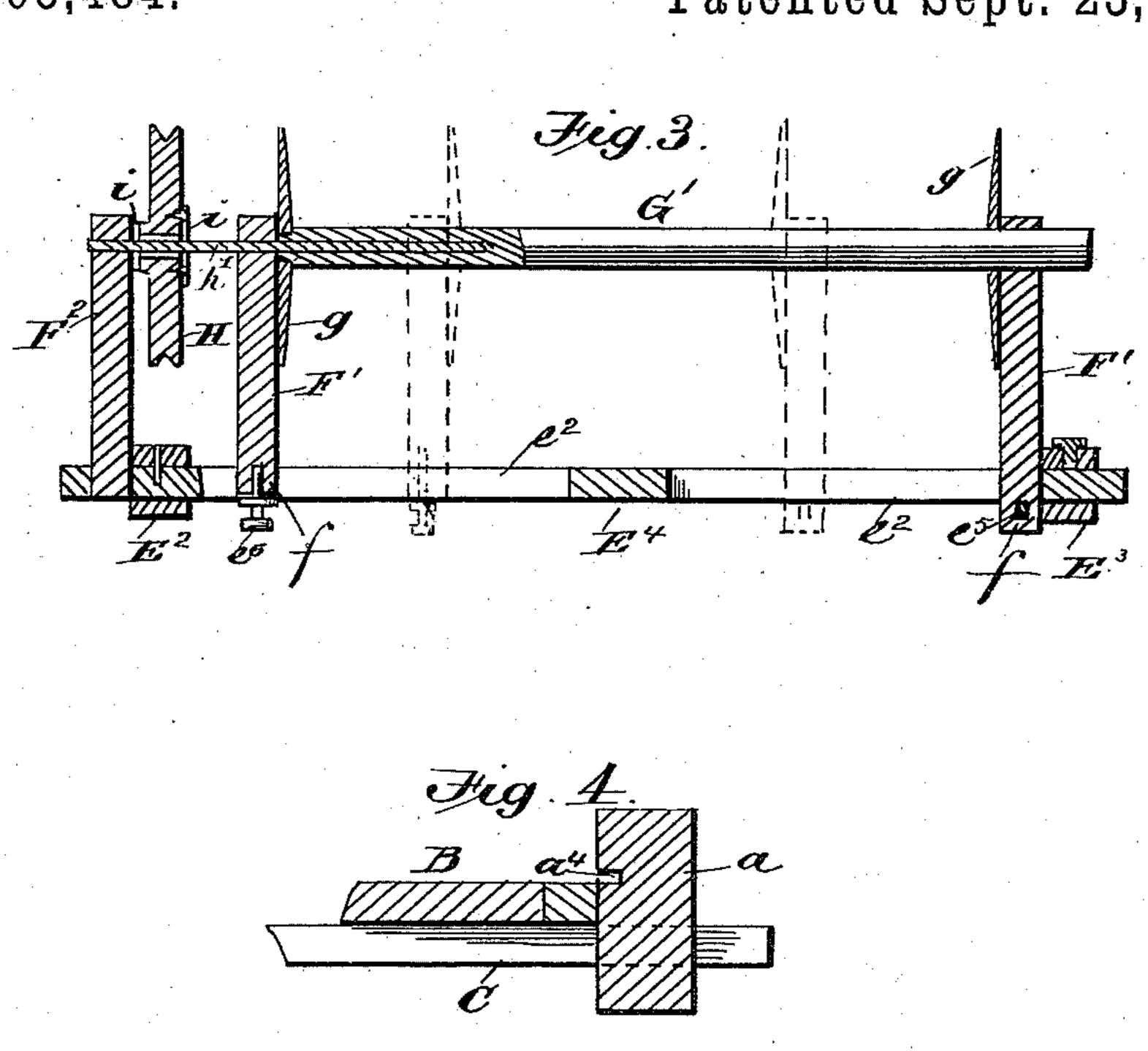


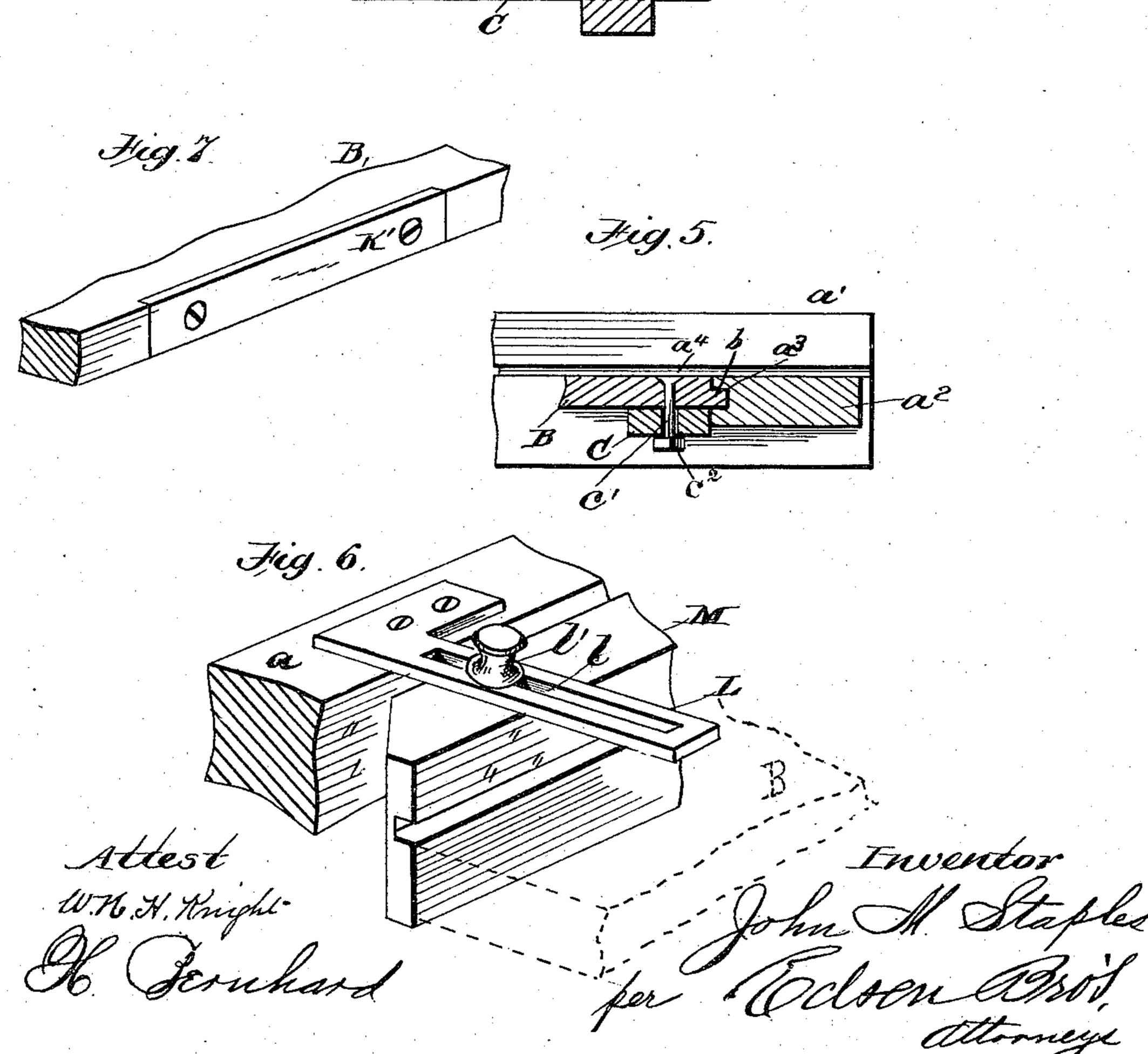
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MACHINE FOR TRIMMING WALL PAPER.

No. 305,484.

Patented Sept. 23, 1884.





United States Patent Office.

JOHN MORRIS STAPLES, OF ROSE MILLS, VIRGINIA.

MACHINE FOR TRIMMING WALL-PAPER.

SPECIFICATION forming part of Letters Patent No. 305,484, dated September 23, 1884.

Application filed July 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, John M. Staples, a citizen of the United States, residing at Rose Mills, in the county of Amherst and State of Virginia, have invented certain new and useful Improvements in Machines for Cutting Wall-Paper; 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 and figures of reference marked thereon, which form a part of this specification.

My invention relates to paper-cutting machinery, but more particularly to that class of machines designed for and used by paper-hangers for trimming or cutting the blank edge from wall-paper, borders, &c.; and the especial object of the invention is the provision of a machine which shall be easy to operate, and simple and durable in construction.

As is well known to paper-hangers and others skilled in the art to which my invention appertains, the majority of paper-cutting machines now on sale and in use are, as a rule, complicated, and consequently liable to get out of order, as well as requiring great care and skillful workmen to operate them.

My invention is designed to obviate the disadvantages above set forth; and to the accomplishment of these ends it consists of a rectangular frame mounted upon suitable supports, and provided at each end with a supplemental adjustable portion, the outer end being provided with a roll for the reception of the paper to be trimmed.

It further consists of a frame having grooves upon the inner surfaces of each of the side 40 pieces thereof for guiding the paper to and against the edges of the knife or cutter, and in means whereby the machine is adjusted to suit paper of different widths, as hereinafter described; and it finally consists in the construction, arrangement, and combination of the various parts, substantially as hereinafter

Referring to the drawings, in which similar letters of reference denote similar parts, Figure 1 represents a top plan view of my improved paper cutting and trimming machine.

described and claimed.

Fig. 2 is a side elevation thereof. Fig. 3 is a transverse sectional view taken on the line x x of Fig. 2. Fig. 4 is a cross-section taken through one of the sides of the frame proper 55 on the line y y of Fig. 1. Fig. 5 is a similar sectional view taken on the line z z of same figure. Fig. 6 is a detail perspective view of the means employed for adjusting the paperguide. Fig. 7 represents a portion of the first 60 bottom piece and the stationary cutter secured thereto.

In the drawings, A represents the frame proper, consisting of the side rails, a a', and end or cross rails, a^2 , one end of each of the 65 end rails, a^2 , being rigidly attached to the side rail a, while the opposite ends of the said end rails pass through slots in the side rail a'.

 a^3 represents grooves formed in the inside edges of the end rails, a^2 , for the reception of 70 tenons b, formed on the ends of the bottom pieces, B B', for the purpose of holding said bottom pieces in place and flush with the upper surface of the end rails, a^2 .

C represents rails or slats which pass from 75 side to side of the frame A, and through apertures or slots in the side pieces, a a', below the bottom pieces, B B', at each end and at the middle thereof. (See Fig. 1.) Said slats are provided with long slots c, formed for the 80 reception of bolts c', that pass through the first bottom piece, B, and are provided below the slats with thumb-nuts c^2 , the heads of the bolts c' being countersunk in the surface of the bottom piece B. The rails C also serve to hold 85 the side rails, a a', of the frame at any desired distance from each other, the rails C being secured to said side rails by thumb-screws c^3 . The inner surfaces of the side rails, a a', are provided with grooves a^4 , which are in the 90 plane of the upper surface of the bottom pieces, BB', (see Fig. 4,) for the purpose of guiding the paper to the cutters.

D represents legs or supports attached to the lower surface of the side rails, a a', at each 95 end thereof.

E E' E² E³ represent supplemental arms adjustably connected by screws e to the outer surfaces of the rails a a', at each end thereof, the screws e passing through slots e' in the 100 arms, as shown. Each pair E E' and E² E³ of said arms are connected together by a rail,

 E^4 , which is provided with a slot, e^2 , to receive tenons f upon the lower ends of standards F F', that support the delivery and receiving rolls G G'.

G represents the delivery-roll, consisting of a small rod that connects the standards F, and is provided at each end with guards h, that are attached to said standards, which are adjustable toward or from each other in the 10 slots e^2 , and are held at any desired distance apart by either a slip-pin, e^5 , or set-screws e^6 . (See Fig. 3.)

G' represents the receiving-roll mounted in the standards F', and is provided with guards 15 g, one end of the roll G' being provided with a tenon that fits into a mortise in one of the guards g, the opposite end of the roll passing through the other guard and standard F', as shown. The standards F' are made adjust-20 able for the same purpose as that described in connection with standards F.

F² represents a standard mounted upon the upper surface of the rail E⁴, in line with the standards F', (see Fig. 1,) and between said 25 standards F² and one of the standards F' is mounted a band-wheel, H, upon a shaft, h', which passes through the standards F² F' and pulley H, and into the end of the roll G', at which latter point it is squared, as it is also 30 at the point where it passes through the pulley.

i represents lugs of metal surrounding the shaft h' at each side of the pulley H, as shown in Fig. 3. The pulley H is connected by a 35 belt, I, with a pulley, I', mounted upon the outer end of a shaft, J, journaled in the rail a of the frame, the inner end of the shaft J carrying a circular knife, K, the outer side of which bears against a second stationary knife, K',

40 secured to the outer edge of the bottom piece, B. The circular knife is kept pressed against the knife K' by a spring, k, that surrounds the shaft J between the rail a and knife K.

The dotted lines k', Fig. 1, show a long shaft 45 provided with an adjustable knife for the purpose of trimming and cutting borders. When] said latter knife is used, the bottom piece B' is removed and the piece B adjusted to suit, as shown by dotted lines in Fig. 1.

L L represent brackets attached to the upper surface of the rail a, which are provided with slots l to receive adjusting-screws l', which pass through said slots and into an adjustingguide, M, placed behind the knife K. The

55 guide Mis provided upon its face with a groove, said groove being in the same plane as the surface of the board B, for the purpose of guiding the trimmed paper to the roll G'.

N represents a press plate or bar, which ex-60 tends diagonally between the side rails, a a', and is secured to the rail a by a hook, n, its office being to keep the paper down upon the bottom boards, BB'. The machine is operated by a crank, J', attached to the shaft J.

The operation of my improved cutting and 65 trimming machine will be readily understood

from the foregoing description.

I am aware that changes in the detail of construction can be made without departing from the principle or sacrificing the advan- 70 tages of my invention. I would therefore have it understood that I do not limit myself to the exact form and proportion of parts shown and described, but assert my right to make such changes as fairly fall within the scope of my 75 invention. My machine may be used for trimming other material than paper.

What I claim is—

1. In a paper-trimming machine, the frame A, having the side rails, aa', and end rails, a^2 , 80 in combination with the bottom pieces, B B', and adjustable cross-rails C, substantially as described.

2. In a paper-trimming machine, the frame A, constructed as described, in combination 85 with the adjustable arms E E' E² E³, connected at their outer ends by rails E^4 , having slots e^2 , to receive standards F F', which support and carry the rolls G G', substantially as described.

3. In a paper-trimming machine, the com- 90 bination of the adjustable frame A, provided with adjustable arms E E' E² E³, having slotted cross-rails E4, with adjustable standards F F', and fixed standard F², for supporting rolls G G', provided with guards h g, and g_5 means, substantially as described, for adjusting said rolls, as and for the purpose described.

4. In a paper-trimming machine, the combination of the slotted cross-rail E4, provided with standards F' F2, roll G', having guards 100 g, with a shaft, h, and pulley H, and means, substantially as described, for rotating said pulley, whereby the roll G' may be adjusted or moved and receive rotary motion, substantially as described.

5. In a paper-trimming machine, the combination of the adjustable frame A, having rails a a', provided with grooves a^4 , with an adjustable guide, M, brackets L, having slots l, bottom pieces, BB', knives KK', and means, 110 substantially as described, whereby the paper is held in position and guided to and against said knives, substantially as described, for the purpose set forth.

In testimony whereof I affix my signature in 115 presence of two witnesses.

JOHN MORRIS STAPLES.

Witnesses:

EDWIN HEWITT, HARRIET HEWITT.