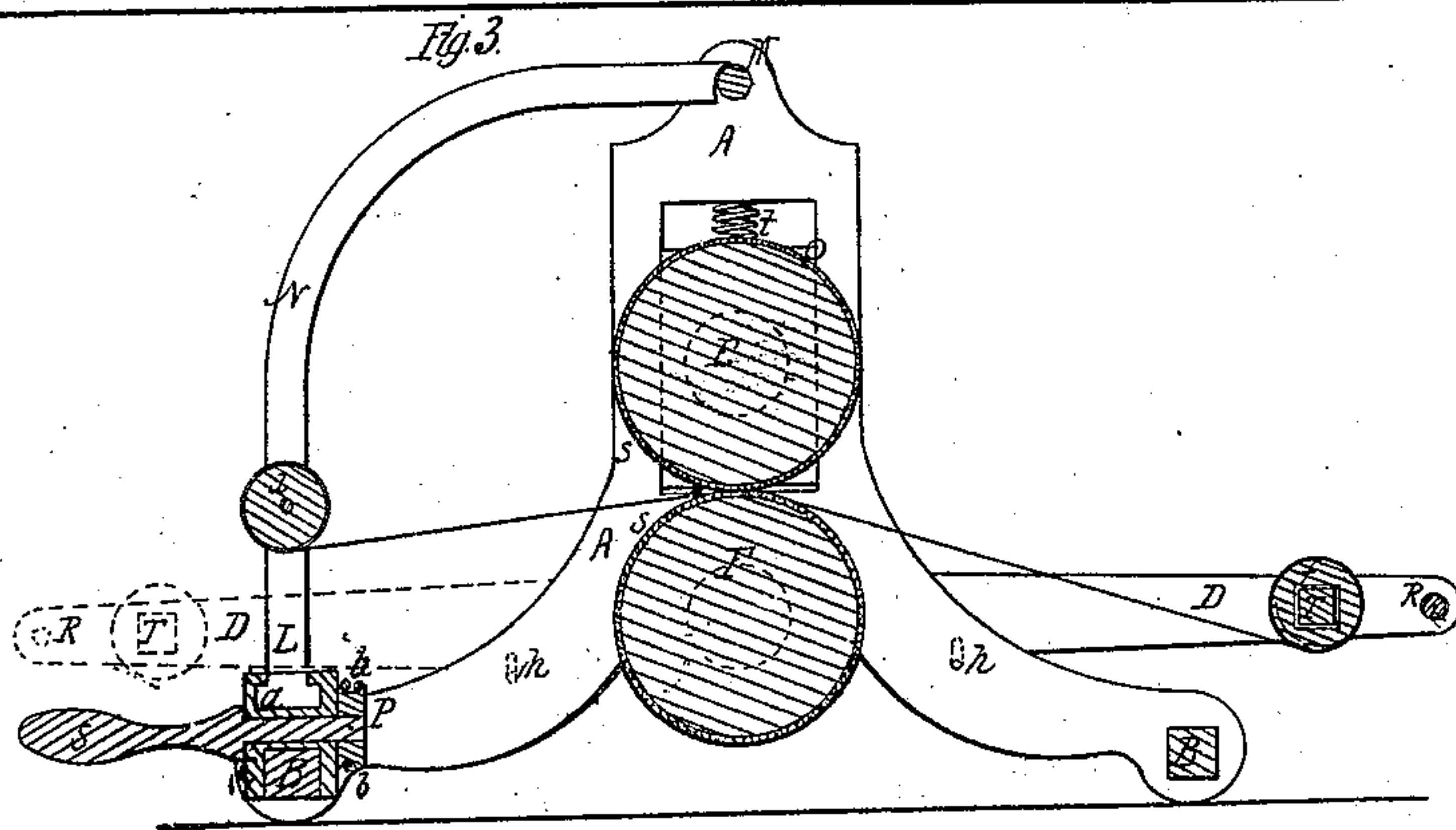
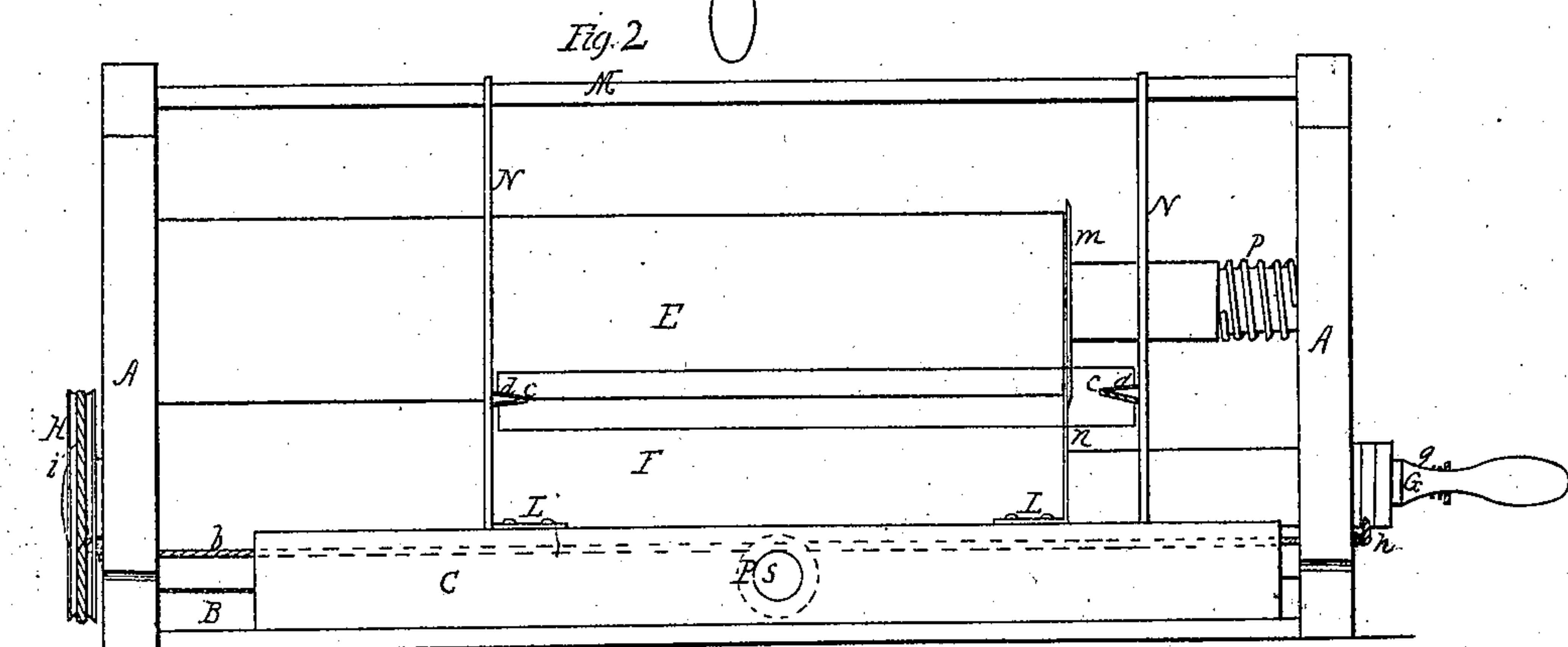
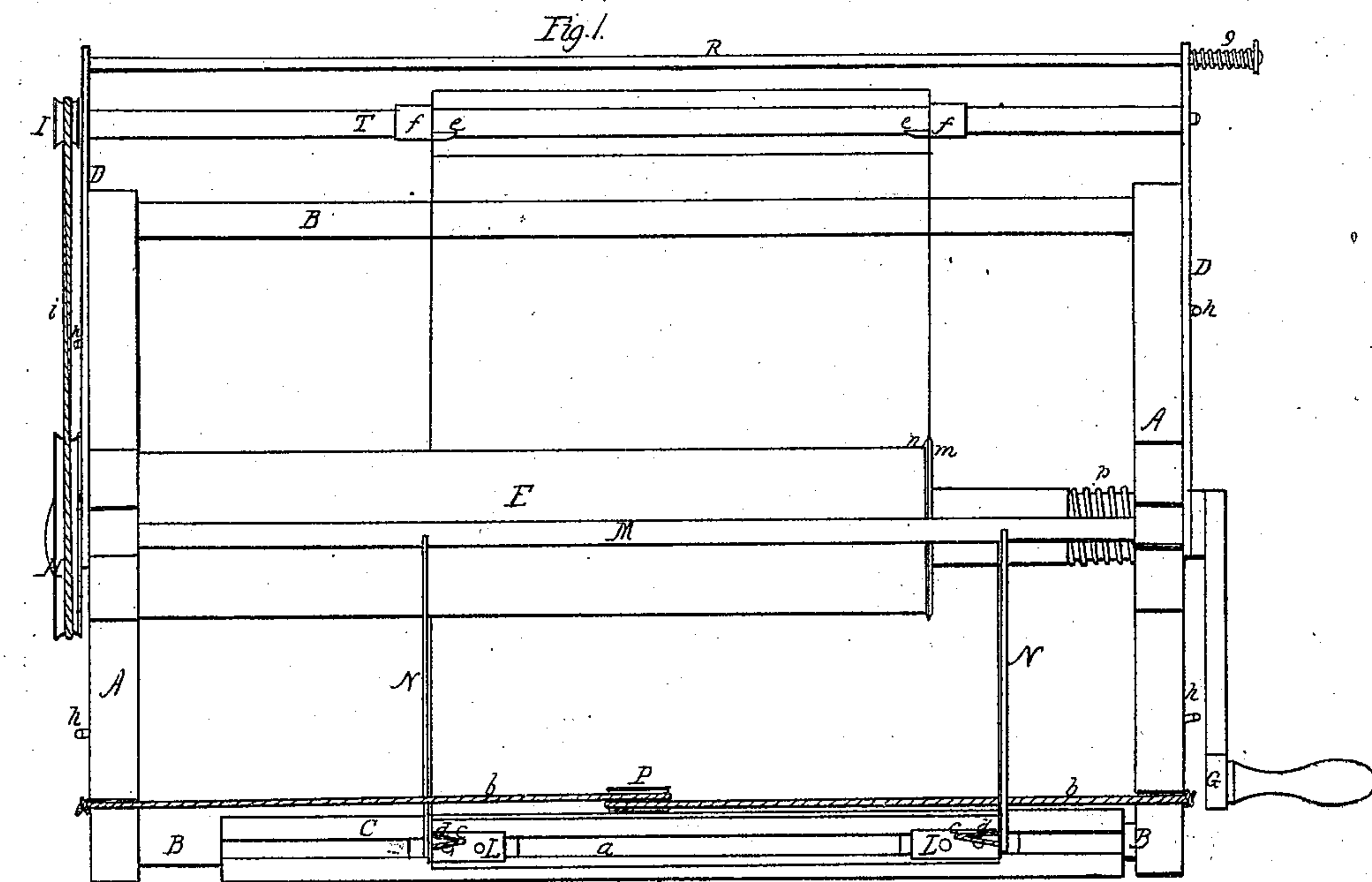


H. I. Brunner.
Mach. for Edging Wall Paper.
N^o 14,303. Patented Feb. 26, 1856.



UNITED STATES PATENT OFFICE.

HENRY I. BRUNNER. OF NAZARETH, PENNSYLVANIA.

MACHINE FOR EDGING WALL-PAPER.

Specification of Letters Patent No. 14,303, dated February 26, 1856.

To all whom it may concern:

Be it known that I, H. I. BRUNNER, of Nazareth, in the county of Northampton and State of Pennsylvania, have invented a
5 new and Improved Machine for Trimming the Edges of Wall-Paper; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of
10 this specification, Figure 1 being a plan of the machine; Fig. 2, a side elevation thereof; Fig. 3, a transverse vertical section of the same; Fig. 4, a perspective of a part detached.

15 Like letters designate corresponding parts in all the figures

The frame, in which the parts are mounted, is composed of two end blocks A, A, connected by two bars B, B. A sliding
20 carriage C, is provided with a groove in its under side, which fits upon either of said bars B, B, the groove and bars being angular or otherwise arranged so that the carriage may not turn on the bars. In the
25 upper side of the carriage C, there is also another groove *a*, in which two blocks L, L, are allowed to move somewhat tightly, so as to remain in any position where they are left. An arm N, extends upward from each
30 block L, and curves over till the upper end rests against a rod M, in the top of the frame, without being attached thereto. At a suitable point in each of these two arms, is inserted a pivot *d*, formed and situated
35 substantially as represented in the drawings. Their use is to hold the rolls of paper to be trimmed, the edges of which are placed over them, as bearings. With simple fixed pivots, the paper will often become wedged
40 thereon, and not readily unroll, or have its inner corners torn. To obviate this I place washers, or caps *c c* upon the outside of the pivots so as to revolve easily about them. A modification of this device would be to allow
45 the pivots to freely turn in their sockets. Through the frame C, passes a spindle S, having a suitable handle on the outer end for turning it; and on its inner end a pulley P, around which passes a cord *b*, the ends
50 of which are respectively secured to the two end pieces A A of the frame. By turning the spindle in either direction the carriage C will be moved in a corresponding direction and thus the roll of paper be adjusted
55 to a proper position for trimming and its

position varied if required during the operation.

The edges of the rolls are trimmed by means of two circular knives *m, n*, situated respectively on rollers E, F, so as to act together as shears, in the manner represented
60 in the drawings. The rollers are just far enough apart to admit the thickness of the paper and draw it through by their own motion. To render their operation more efficient, they may be covered with cloth or other
65 suitable elastic or yielding material. The lower roller F, is turned by means of a winch G, on one end of its shaft, and the upper roller receives its motion therefrom
70 by means of the friction of the paper passing between. The upper roller turns in bearings *o* (Fig. 3,) which are pressed down by slight springs *t*, in order to insure a proper contact and pressure upon the paper.
75 The edge of the upper knife *m* is also kept in close contact with that of the other knife *n* by means of a coiled spring *p*, or its equivalent, upon the end of its roller, as shown in the drawings.
80

The paper is again rolled up directly after being trimmed, by the following arrangement: A small angular winding rod T, is mounted in two projecting arms D, D. As one end, at least, of this rod is required
85 to be set free in order to slip off each roll of paper after being trimmed, it is desirable to have a convenient device to allow it to be readily detached from, and then re-inserted in, its bearings. I accomplish this by allowing the arms D, D, to be separate sufficiently
90 to withdraw one bearing of the rod; and causing these arms to be held together after the rod is again placed in its bearing, by a coiled spring *g*, or its equivalent, upon the
95 projecting end of a rod R, passing from one arm to the other, as shown in Fig. 1. The revolving motion of the winding rod is given by means of a band, or cord, *i*, passing around a pulley H, on the shaft of the
100 roller E, and another pulley I, on the end of said rod. The relative sizes of these pulleys should be about the same as the relative diameters of the roller F, and the rod; and the varying diameter of the roll, as it in-
105 creases, is provided for by having the band *i*, loose enough to slip on its pulleys as much as necessary.

The first end of the paper is secured to the winding rod, by means of two collars 110

f, f, which slide freely on the rod. At one angle of each is a pointed projection *e* (as seen most distinctly in Fig. 4), which is easily slid over the corner of the paper and thus confines it. These collar clamps are readily moved away from the paper which is thus set free. One collar is slipped off each time, before the roll of paper.

Sometimes paper is rolled up with the wrong side out; and fine qualities often require both edges to be trimmed. To accommodate these circumstances it is desirable to be able to pass the paper through the machine in either direction. My machine provides for this by having the projecting arms *D, D*, turn on the shaft of the lower roller *F*, so that they can be carried to either side of the machine without interfering with any motion thereof. Hooks *h, h*, are secured to the ends of the machine to hold the said arms in the proper position on either side. In connection with this arrangement of the arms *D, D*, the carriage *C*, is arranged so that it may be simply lifted from its bar *B*, and transferred to the bar on the other side of the machine.

The machine as above described, will trim a roll of paper in a few seconds, with a degree of accuracy and neatness unequalled by any other means in use.

Having thus fully described my improved machine for trimming the edges of wall paper, I wish it to be understood, that I do not claim revolving shears, upon feeding rollers; but

What I claim as my invention and desire to secure by Letters Patent is,

1. The bearing pivots *d, d*, with friction caps *c c*, supporting arms *N, N*, movable blocks *L L*, sliding carriage *C*, and adjusting device *S, P, b*, arranged and combined substantially in the manner and for the purposes herein set forth.

2. I also claim the sliding clamps *f, f*, constructed and operating substantially as herein set forth.

3. I also claim the combined arrangement of the rolling and unrolling devices, so that they may be quickly shifted from one side of the machine to the other, for the purposes specified.

The above specification of my new and improved machine for edging wall paper, signed by me this twenty first day of December 1855.

HENRY I. BRUNNER.

Witnesses:

CHRISTN. D. BUSSE,
C. G. BOEHL.