

(No Model.)

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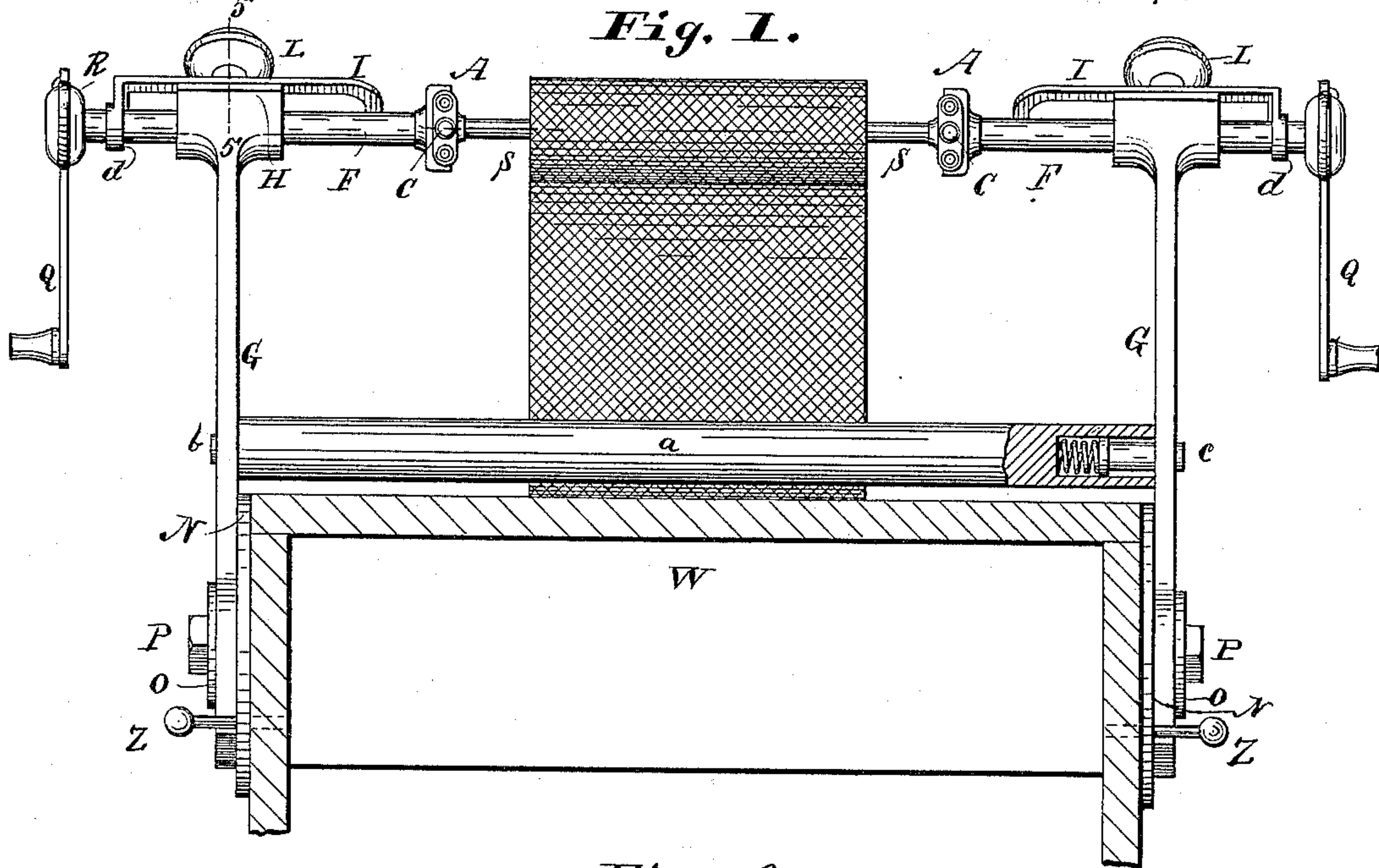
S. MORITZ.

MACHINE FOR ROLLING AND UNROLLING CLOTH.

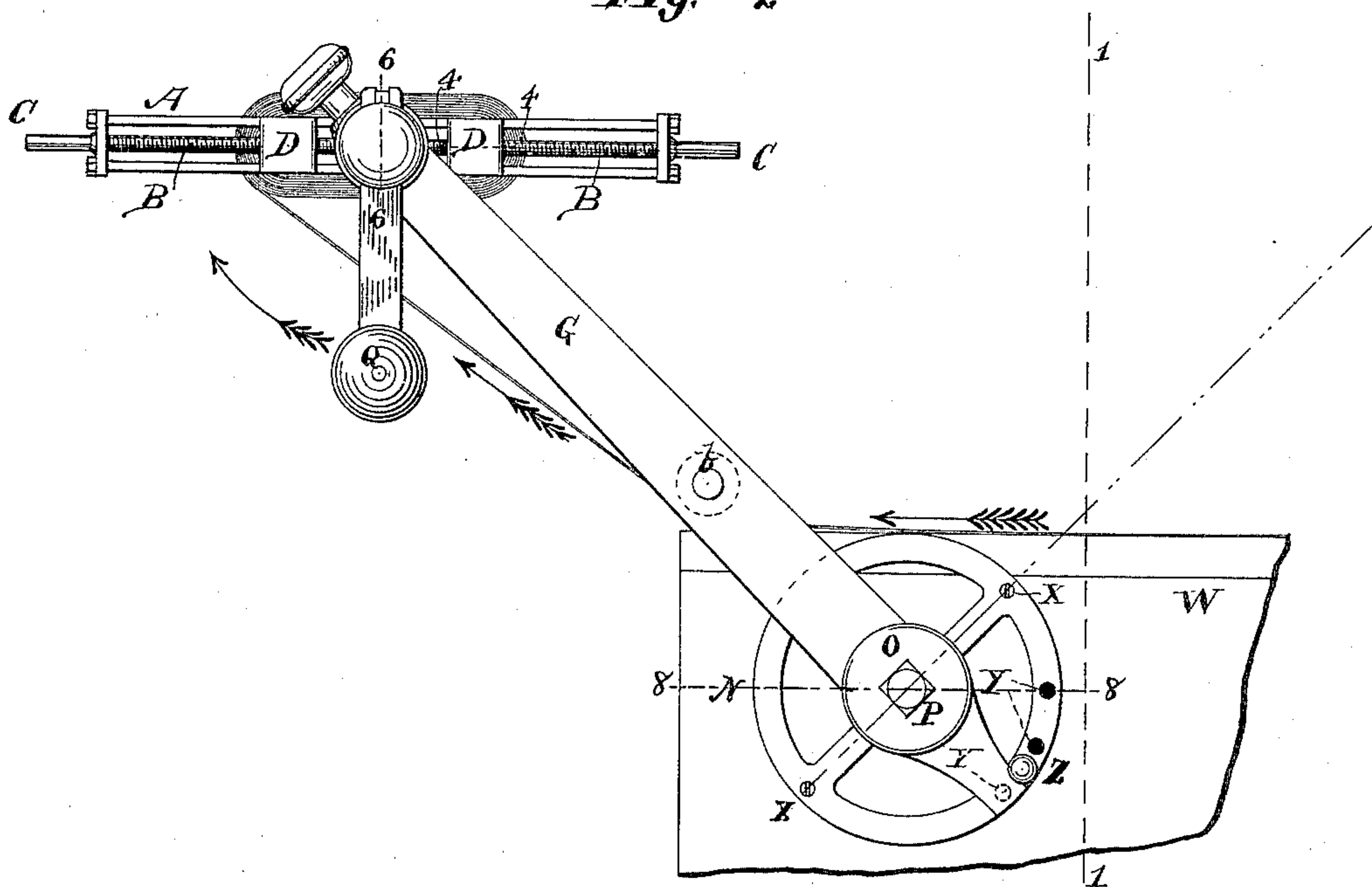
No. 392,055.

Patented Oct. 30, 1888.

*Fig. 1.*



*Fig. 2.*



Witnesses:

Charles Pickles,

Chas. G. B. Drummond.

Inventor:

Simon Moritz.

(No Model.)

2 Sheets—Sheet 2.

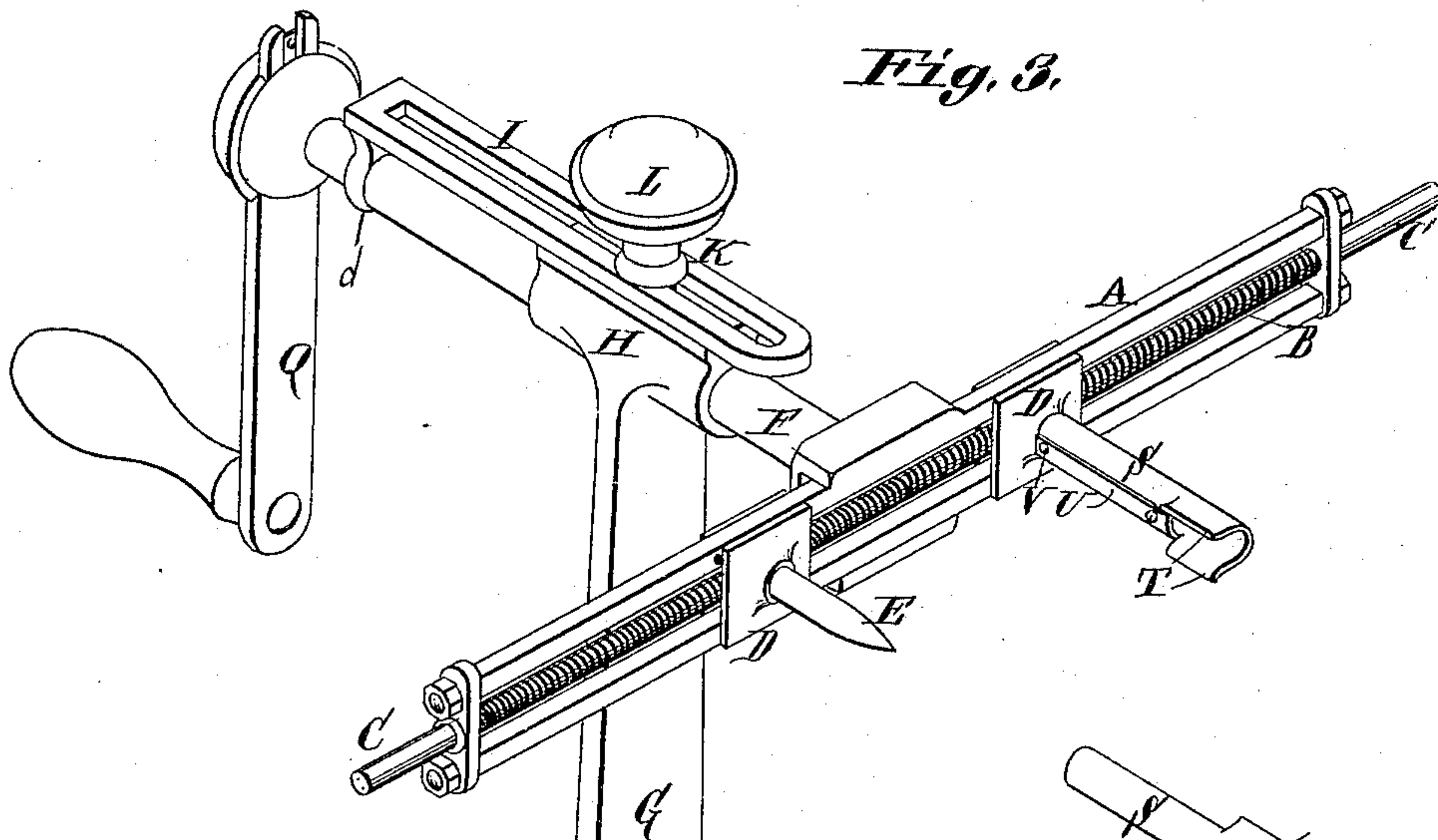
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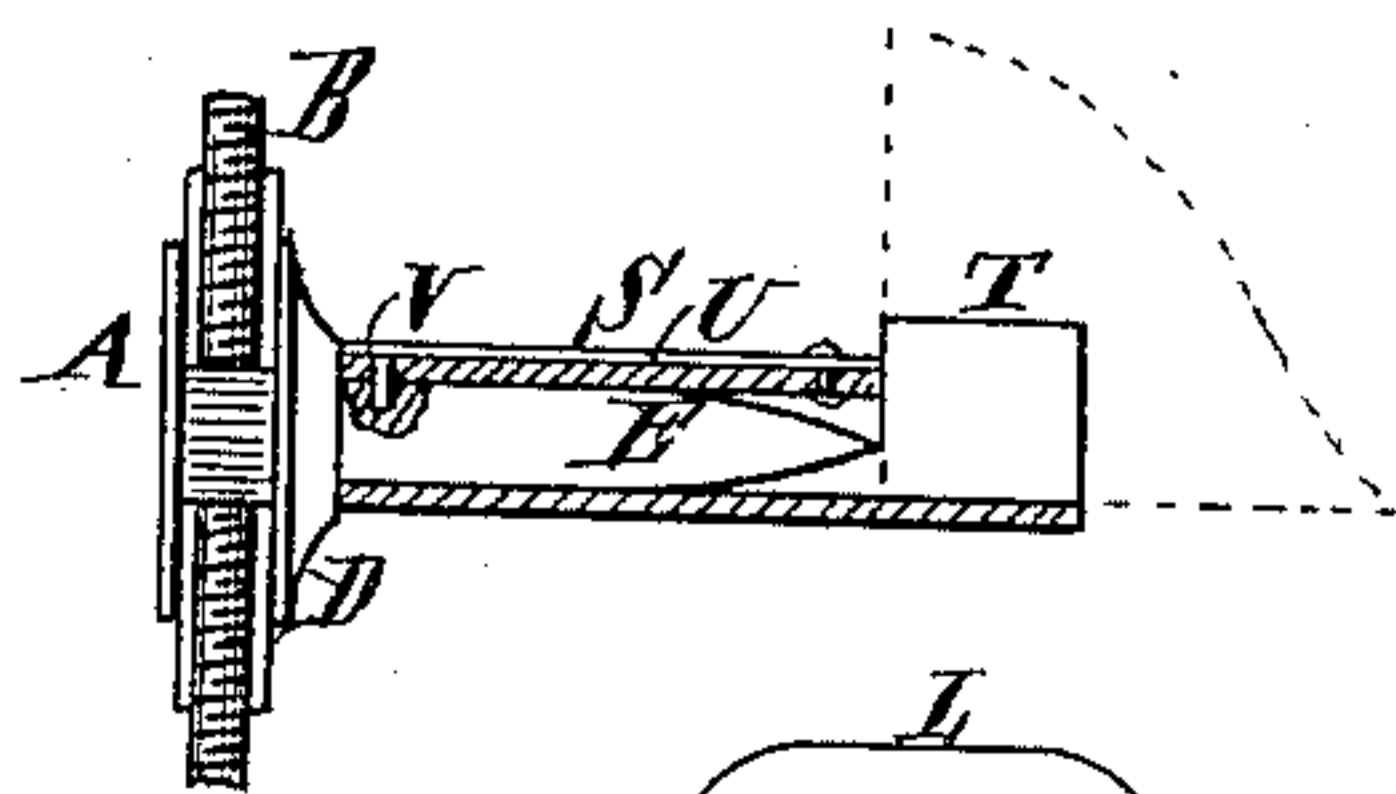
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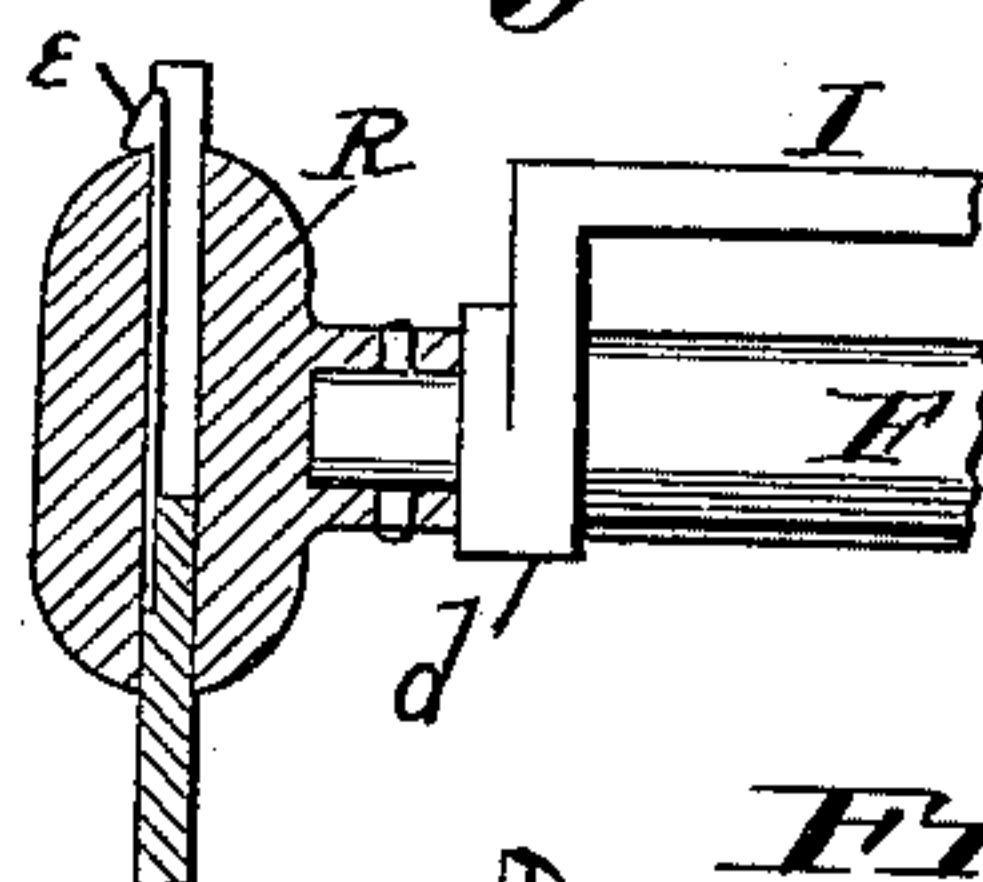
*Fig. 3.*



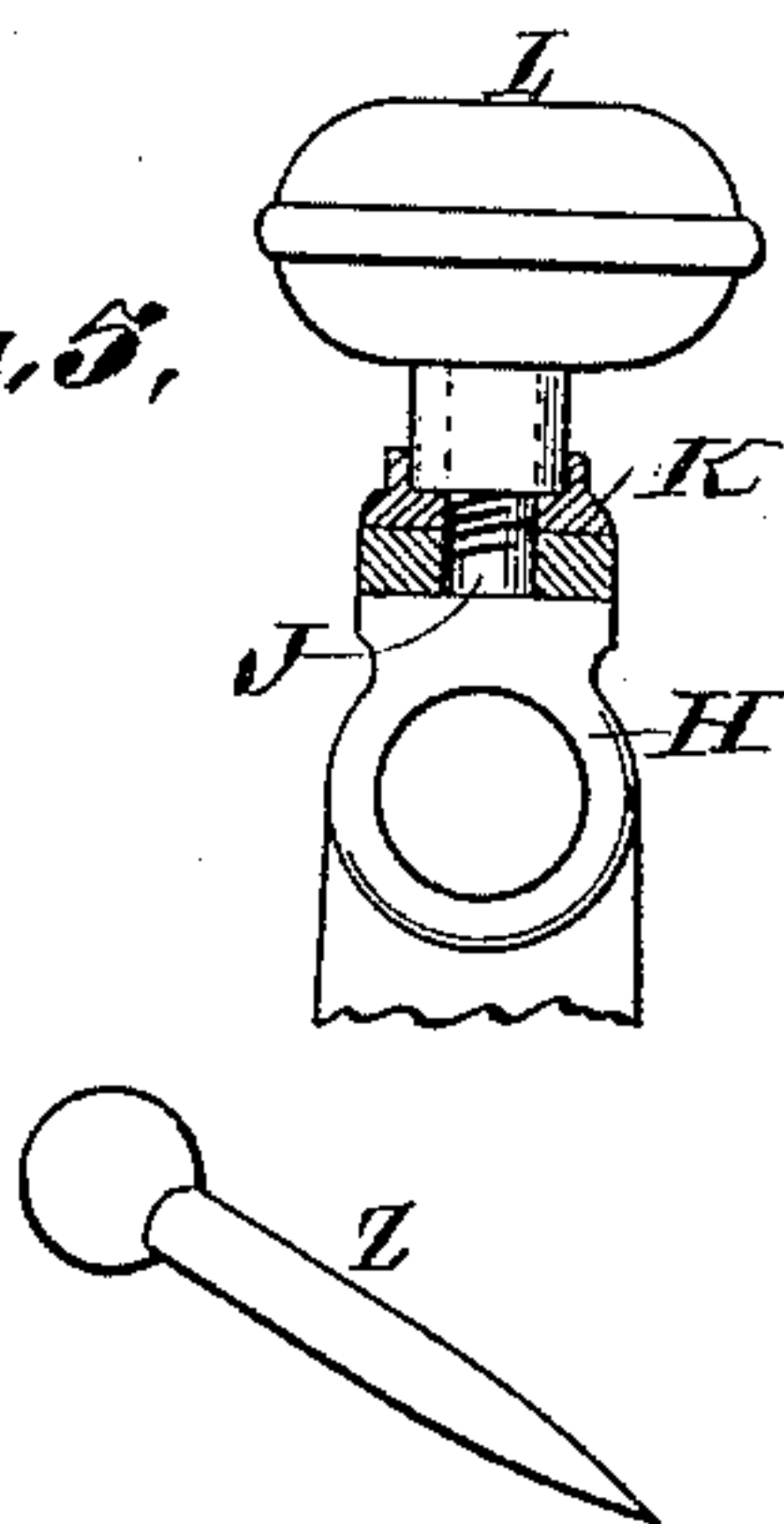
*Fig. 4.*



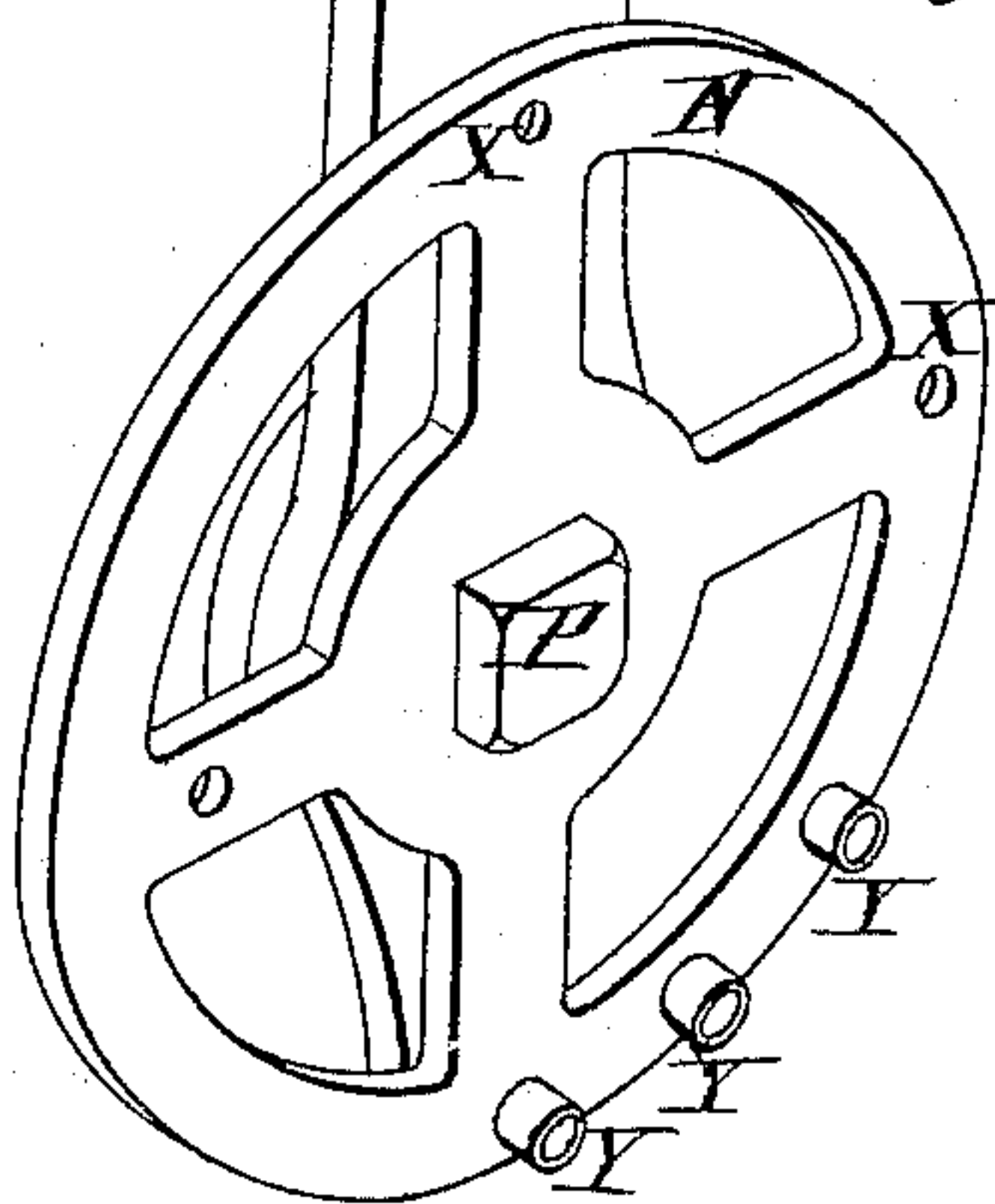
*Fig. 6.*



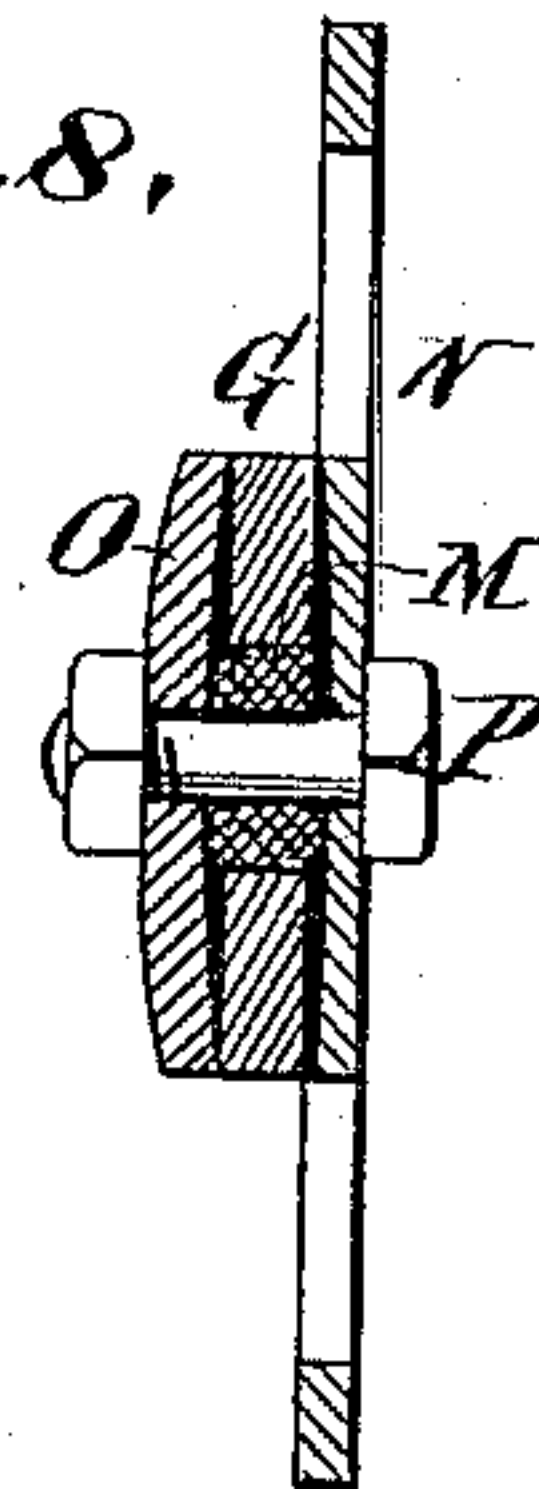
*Fig. 5.*



*Fig. 7.*



*Fig. 8.*



*Attest;*

*Charles Pickles.*

*Inventor;*

*Simon Moritz*



# UNITED STATES PATENT OFFICE.

SIMON MORITZ, OF ST. LOUIS, MISSOURI.

## MACHINE FOR ROLLING AND UNROLLING CLOTH.

SPECIFICATION forming part of Letters Patent No. 392,055, dated October 30, 1888.

Application filed July 26, 1887. Serial No. 245,320. (No model.)

*To all whom it may concern:*

Be it known that I, SIMON MORITZ, a citizen of the United States, residing in the city of St. Louis, and State of Missouri, have invented a new and useful Machine for Rolling and Unrolling Cloth; and I do hereby declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to which it appertains to make, construct, and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The object of my invention is to provide spongers, cutters, and others who in the course of their occupations are constantly required to unroll and roll cloth with a convenient and rapid means of so doing by furnishing them an easy and appropriate means of suspending the roll of cloth for unrolling the same and the board or bolt for rolling the same thereon in such a manner that the roll or board may be revolved freely in the required direction and the cloth unrolled or rolled readily and rapidly without the constant handling of the roll or bolt. I attain this object by means of the mechanism hereinafter described, and illustrated by the accompanying drawings hereinbefore referred to, in which drawings—

Figure 1 is a side view of my apparatus, partly broken out and partly in section, on line 1 1 of Fig. 2; Fig. 2, an end elevation of the same; Fig. 3, a perspective view of the parts at one side of the apparatus; Fig. 4, a detail, partly in section, on line 4 4 of Fig. 2, and partly in elevation; Fig. 5, a view, partly in section, on line 5 5 of Fig. 1 of the upper part of the standard and attached parts, and of a pin, Z; Fig. 6, a section on line 6 6 of Fig. 2, partly in elevation; Fig. 7, a perspective view of the crank. Fig. 8 is a horizontal section of certain parts on line 8 8 of Fig. 2.

Like letters represent corresponding parts in all figures.

A is a slotted arm.

B is a right-and-left screw, with the threads uniting in the center thereof. This screw passes through the center of the slotted arm A lengthwise, extends unthreaded through suitable bearings, in which it revolves, in the

ends of the arm, and also beyond the ends of the arm, and to the extensions beyond these ends the handles or pieces C are attached.

D are slides on the slotted arm A, with suitable threaded borings to receive the right-and-left screw B, which passes through them in such a manner that when the screw B is turned one slide works on the slotted arm A by means of the right-handed thread of the screw B and the other by means of the left-handed thread of that screw, and so that the two slides on each arm are always equidistant from the center of the arm.

E are fingers attached to the slides D.

F is a shaft attached to the slotted arm A in such manner that when the shaft is turned the arm A will revolve on its center.

G is a standard, and H a bearing on the standard G for the shaft F.

I is a slotted adjusting-bar having pendent at one end a hanger, *d*, to serve as a journaled bearing for the shaft F at its crank end; J, a stud-bolt on the bearing H; K, a washer on the stud-bolt J, and L a clamp-nut for the stud-bolt J. The hanger *d* serves in conjunction with the bar I, the stud-bolt J, which passes through the slot of the bar I, the clamp-nut L, and the washer K, where a washer is used, as the means of shifting the shaft F through the bearing H and clamping it in position, the shaft F having on one side a shoulder bearing against the hanger, and bearing against the opposite side of the hanger is another shoulder formed by the crank-socket on the crank end of the shaft F.

M is a bushing passing through the lower end of the standard G, where the disk N is attached.

N is a disk on the inner side of the standard, and is slightly concave in its center on the side next the standard.

O is a washer over the bushing on the outer side of the standard and is slightly concave on the side next the standard.

P is a bolt passing through the eye of the disk N and through the bushing M and the washer O, and turning upon the bushing M, between the disk and the washer, is the standard G, the disk, bushing, standard, and washer being clamped together by the bolt P, and so



clamped that the standard G will turn freely between the washer and the disk on the bushing.

Q is a crank, with its catch-spring *e*, shoulders *f*, and handle *g*, and R is a crank-socket on the outer end of the shaft F.

S, Figs. 3 and 4, are sleeves to be placed over the fingers E when the machine is to be used for rolling the cloth.

T are ears on the sleeves S, in which the corners of the board on which the cloth is to be rolled are placed.

U are catch-springs attached to the sleeves S, having catch-pins V attached thereto, which, when the sleeves are slipped upon the fingers, are forced by the springs into openings in the fingers, so located that the sleeves are not only fastened on the fingers, but the ears of the sleeves placed to receive the corners of the board.

W is a table of suitable width, to each side of which one of the sets of devices shown in Fig. 3 must be fastened, near its corner, through openings X in the disk in such a manner that the openings Y in the disks may be in the same relative position to each other, that the standard on each side may be adjusted in precisely the same position on each side by inserting the pins Z through corresponding openings, Y, in each disk, and in such manner that when the pins Z are inserted in the lower openings, Y, on each side the standards, when thrown back upon them, will lean at an angle upwardly and outwardly from the end of the table to which they are attached sufficient to keep the machine in place when the cloth is being unrolled therefrom—to wit, about thirty degrees—and may be lowered until they reach almost a horizontal position when the pins are in the upper openings, Y, on each side. When the machine is not in use, it may be lowered to the sides of the table by removing the pins Z and allowing the device on each side to fall down by the side of the table, when it will be comparatively out of the way.

*a* is a roller with a pin, *b*, in one end and a spring-actuated bolt, *c*, in the other. In rolling the cloth this roller may be fixed between the standards by placing the pin in the opening *d'* in one standard and the spring-bolt in the opening *d'* in the other standard for the purpose of keeping the cloth nearly horizontal with the table until it is almost beneath the board suspended in the machine on which it is to be rolled to aid rapid and proper rolling: but the device may be used for rolling either with or without the roller.

Fig. 6 is a vertical section, partly in elevation, on line 6 6 of Fig. 2, showing the crank end of the shaft F with the crank-arm passing through its crank-socket R and locked therein by the catch-spring *e*, and also the crank end of the slotted adjusting-bar I, with its hanger *d* pendent therefrom as a journaled bearing for the shaft F.

Fig. 7 shows the crank with its catch-spring *e*, shoulders *f*, and handle *g*.

Fig. 8 is a horizontal section on line 8 8 of Fig. 2, showing the lower end of the standard G journaled upon the bushing M, and the bolt P, passing through the eye of the disk N, through the bushing M and the washer O, and locking them together.

The whole machine consists of two parts, each similar to that described with the roller between them, except that the part on one side of the table may be either with or without the slotted adjusting-bar I, the stud-bolt J, the washer K, and the clamp-nut L, and the shaft on that side made unadjustable, and that the roller may or may not be used, as hereinbefore stated.

To use my machine, one of the devices described is fastened, as directed, to each side of the table, and when used for unrolling the cloth without the sleeves, roller, or crank the standards are thrown forward toward the other end of the table until the slotted arms A almost touch the top of the table. The roll of cloth is then placed between the arms. The fingers E on one side are then so adjusted by the right-and-left screw that the distance between the inner surfaces of the fingers is a little greater than the width of the board on which the cloth is rolled. The fingers are then forced into the roll by means of the shaft F, which is then clamped, or the roll may be thrust upon the fingers if the shaft on that side be unadjustable or if it be treated as unadjustable. The fingers on the other side are then adjusted the same as the first, and are then forced into the roll by the shaft F on that side, which is then clamped by the clamp-nut L on the stud-bolt J. The two parts of the machine are then pulled back together until the standard on each side rests on a pin, Z, properly placed, as directed, when the roll will be suspended beyond the end of the table to which the parts are fastened, so that the cloth can be pulled off with the hands, as desired. In rolling the cloth, the two parts of the machine being fastened to the table, as hereinbefore described for unrolling, the sleeves S, with their ears T, are properly fastened on the fingers on each side. The fingers on one side are then adjusted by the right-and-left screw, so as to clamp between the ears of the sleeves on the fingers, the corners of one end of the board or bolt on which the cloth is to be rolled placed between them. The fingers with their sleeves on the other side are then pushed inward by the shaft and the ears on that side by the same means made to clamp the other two corners of the board, and the shaft on that side is then clamped. The whole is then pulled back together until the standard on each side rests on pins Z properly placed. The roller is then fixed in its place, as directed. The cloth is then passed under the roller and up around the board, on which it can then be rolled by turning the crank in the proper direction.

Having fully described my invention, what I desire to claim and secure by Letters Patent is—



1. The combination, in a machine for rolling and unrolling cloth, of the slotted arm A, right-and-left screw B, slides D, fingers E, and sleeves S, with their ears T, catch-springs U, and catch-pins V, all substantially as set forth and described.

2. The combination, in a machine for rolling and unrolling cloth, of the slotted arm A, right-and-left screw B, slides D, fingers E, shaft F, standard G, bearing H, slotted adjusting-bar I, with its hanger d, stud-bolt J, clamp-nut L, bushing M, disk N, with its openings Y, pin Z, washer O, and bolt P, all substantially as set forth and described.

3. The combination, in a machine for rolling and unrolling cloth, of the slotted arm A, right-and-left screw B, slides D, fingers E, shaft F, standard G, bearing H, slotted adjusting-bar I, with its hanger d, stud-bolt J, clamp-nut L, bushing M, disk N, with its openings Y, pin Z, washer O, bolt P, crank Q, sleeves S, with their ears T, catch-springs U, and catch-pins V, all substantially as set forth and described.

4. In a machine for rolling and unrolling cloth, standards G, each having the slotted arm A, right-and-left screw B, slides D, fingers E, shaft F, bearing H, slotted adjusting-bar I, with its hanger d, the stud-bolt J, clamp-nut L, bushing M, disk N, with its openings Y, the pin Z, washer O, and bolt P, all combined and to be used substantially as described and specified.

5. In a machine for rolling and unrolling cloth, standards G, each having the slotted arm A, right-and-left screw B, slides D, fingers E, shaft F, bearing H, slotted adjusting-bar I, with its hanger d, the stud-bolt J, clamp-nut L, bushing M, disk N, with its openings Y, the pin Z, washer O, bolt P, crank Q, sleeves S, with their ears T, catch-springs U, and catch-pins V, all combined and to be used substantially as described and specified.

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Witnesses:

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