

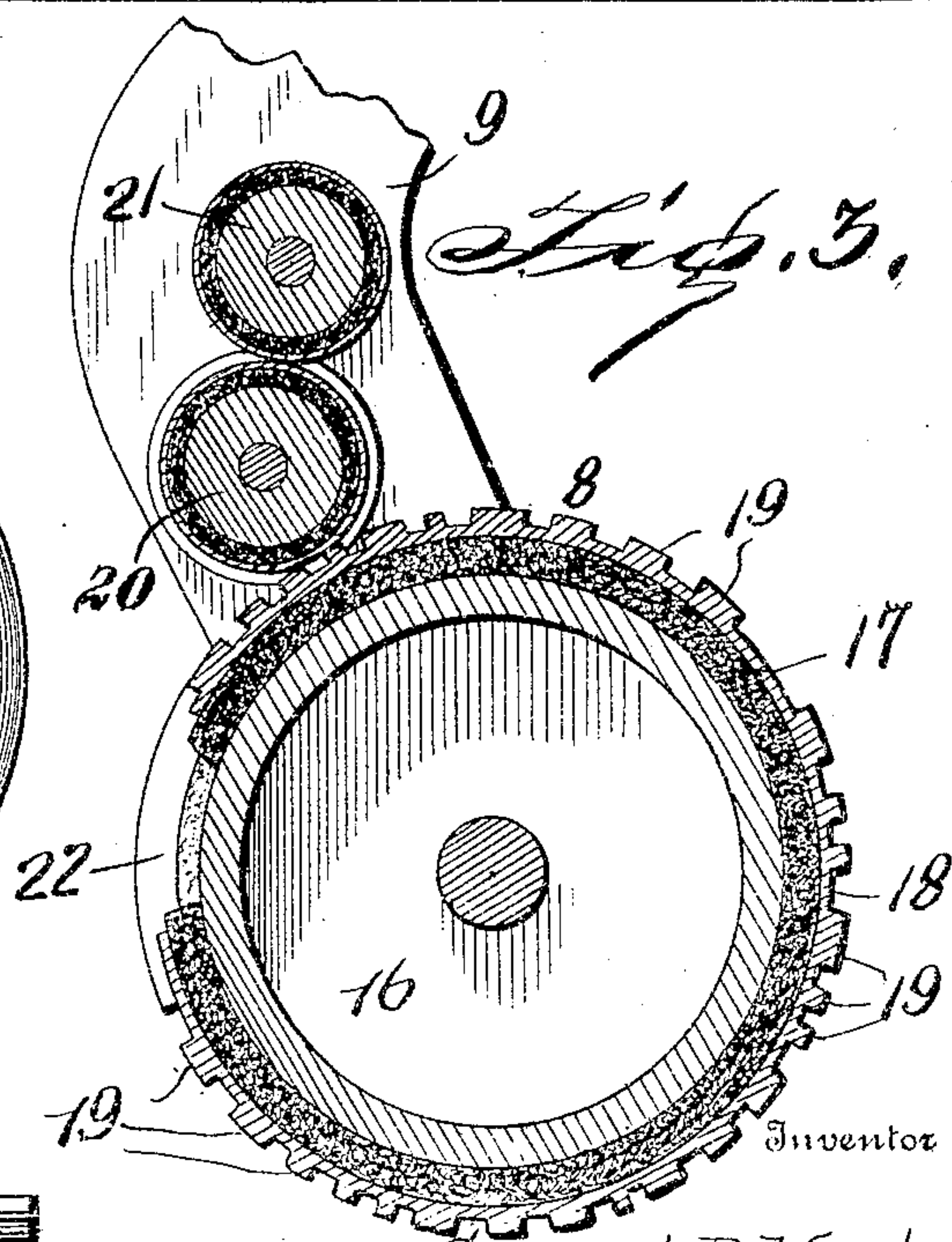
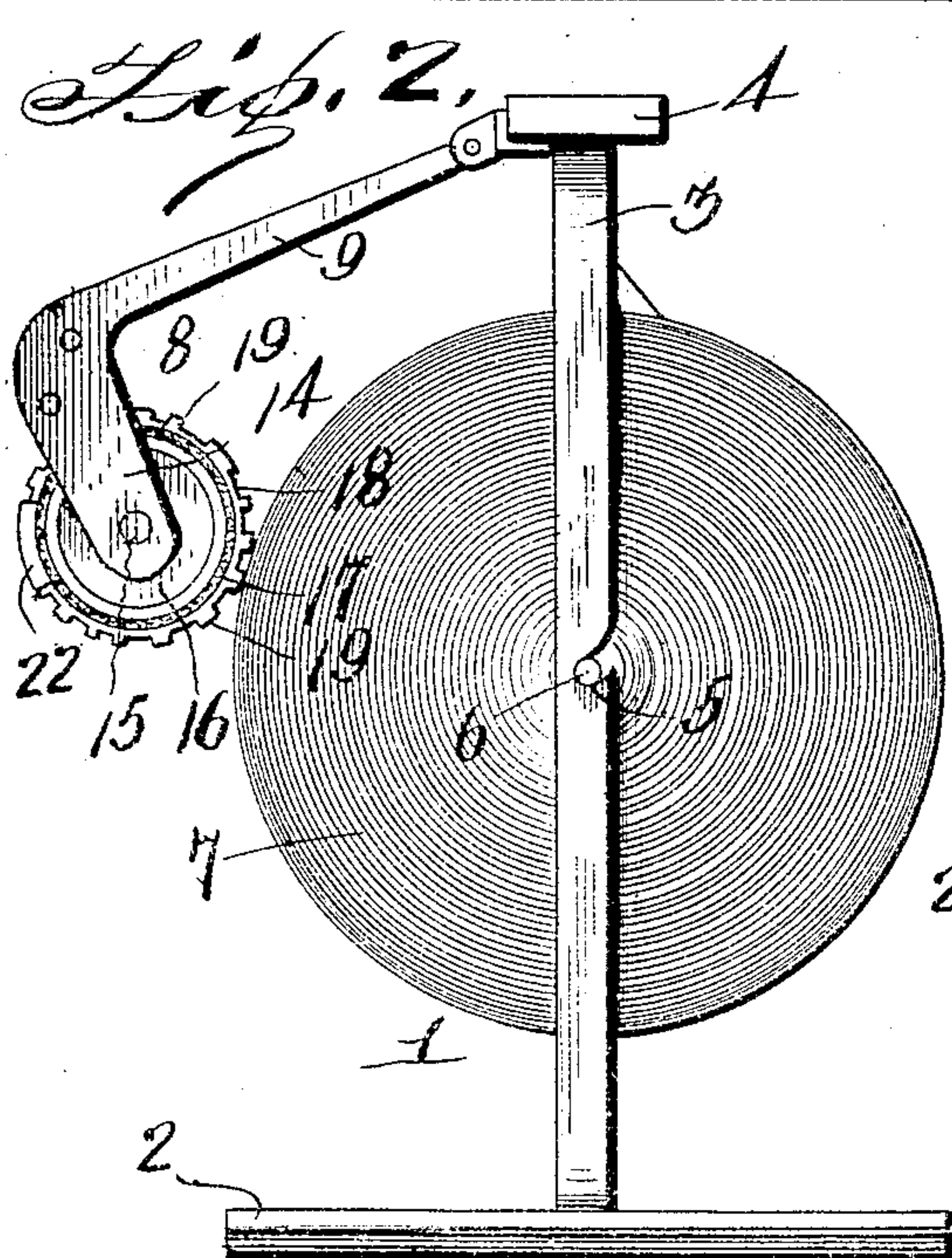
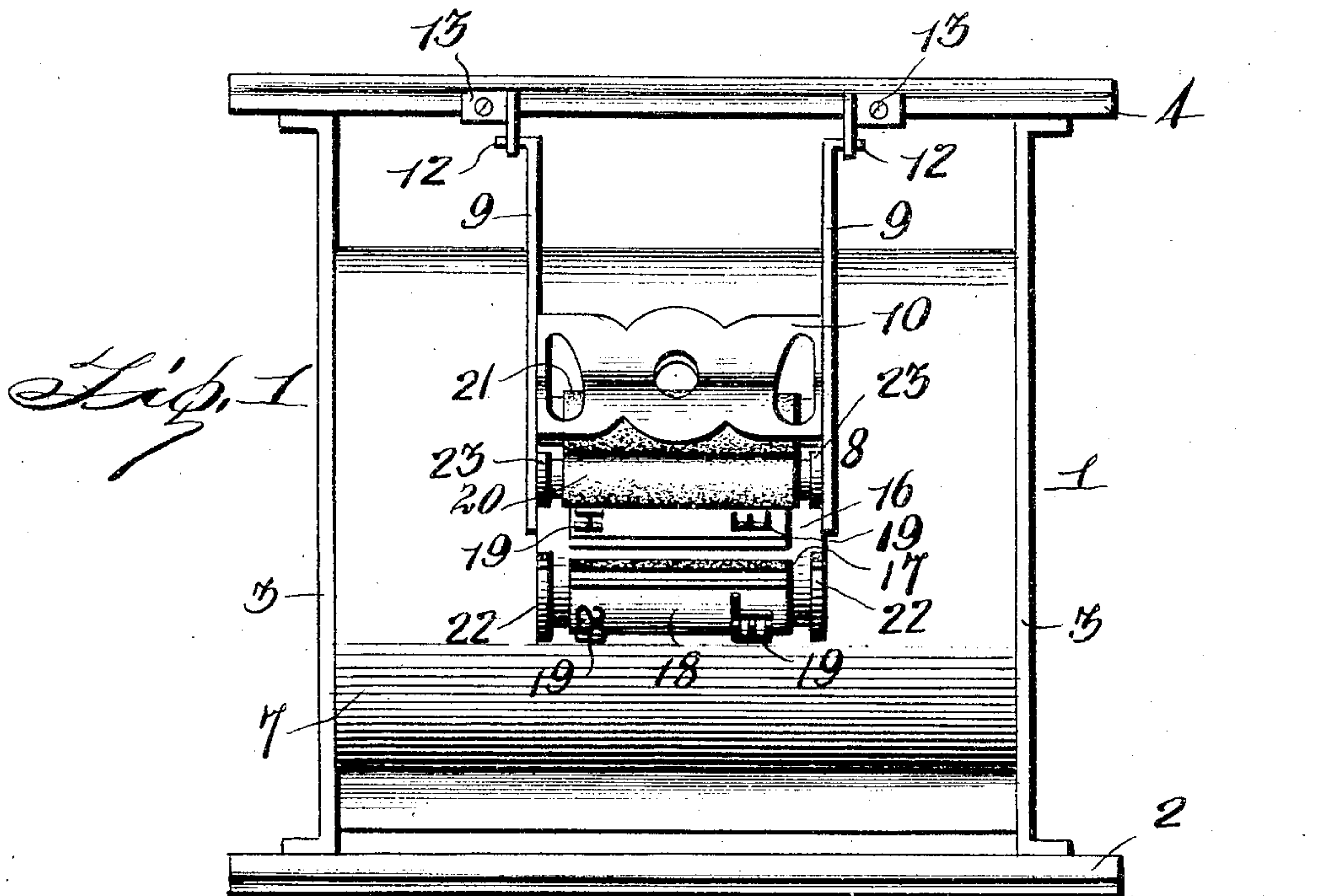
No. 778,665.

PATENTED DEC. 27, 1904.

G. D. HORTON.

PRINTING ATTACHMENT FOR PAPER ROLLS.

APPLICATION FILED MAY 16, 1904.



Witnesses
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PRINTING ATTACHMENT FOR PAPER-ROLLS.

SPECIFICATION forming part of Letters Patent No. 778,665, dated December 27, 1904.

Application filed May 16, 1904. Serial No. 208,243.

To all whom it may concern:

Be it known that I, GILBERT D. HORTON, a citizen of the United States, residing at Snohomish, in the county of Snohomish and State of Washington, have invented certain new and useful Improvements in Printing Attachments for Paper-Rolls; 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.

This invention relates to improvements in printing attachments for wrapping-paper-roll holders.

The object of the invention is to provide a printing attachment for paper-roll holders whereby the paper contained in the roll on said holder may be printed as it is reeled off the holder.

A further object is to provide an attachment of this character which will be simple in construction, efficient in operation, and which will print equally well whether the roll of paper be large or small.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a rear elevation of a paper-roll holder and roll or paper, showing the application of the invention. Fig. 2 is a side elevation, and Fig. 3 is a vertical longitudinal sectional view, of the same.

Referring more particularly to the drawings, 1 denotes the holder, which may be of any suitable construction and is here shown as consisting of a base 2, upright standards 3, and a top cross-piece 4. In the standards are formed the usual bearings 5, in which are journaled the ends of the shaft 6, which supports the roll of paper 7.

The printing attachment 8 consists of a supporting-frame, comprising substantially L-shaped side pieces 9, spaced apart and secured to the ends of a cross-piece 10. On the ends of the upper arms of the side pieces 9 are formed

laterally-projecting trunnions 12, which are adapted to pivotally engage the apertured ears or lugs of bearing-brackets 13, secured to the top cross-piece 4 of the holder.

In the ends of the lower arms of the side pieces 9 are formed bearings 14, in which are journaled trunnions 15, formed on the ends of a printing-roll 16, thereby rotatably supporting said roll between the lower ends of said side pieces.

On the periphery of the roll 16 is secured a strip or coating 17, of sponge, rubber, or other soft elastic material, which forms a yielding bed or backing on which the strip or band 18, containing the type 19, is secured. The band 18 and the type 19 are preferably formed of rubber and cast in one piece.

In the side pieces 9, above the printing-roll 16, is journaled an ink-transferring roll 20, the periphery of which is adapted to engage the surface of the type on the printing-roll. Above the transfer-roll and in engagement with the same is arranged an ink-roll 21. The rolls 20 and 21 are preferably formed of wood having a covering of felt or other absorbent material. The ink being placed on the felt of the ink-roll 21 will be taken from the same by the transfer-roll 20, and thereby evenly distributed on the type of the printing-roll. The transfer-roll being in frictional engagement with the printing-roll is turned thereby as said printing-roll is rotated and being also in friction engagement with the ink-roll will turn said ink-roll, thereby causing an even distribution of the ink over the rolls and type.

In arranging the type strip or band 18 on the printing-roll there is preferably a space left between the ends of said strip or band, and when said space passes the transfer-roll the same would not be turned by the type. In order that said transfer-roll may be continually turned during the operation of the printing-roll, contact-strips 22 are secured to the printing-roll near the outer ends of said roll, said strips extending the length of the space between the ends of the strip or band of type.

On the ends of the roll and in line with the strips 22 are secured friction rings or bands

23, which are adapted to be engaged by the strips 22 on the printing-roll, thereby causing said transfer-roll 20, and through it the ink-roll 21, to be continually turned during the operation of the printing-roll.

When the printing attachment is in place on the roll-holder, the same will drop into engagement with and rest upon the surface of the roll of paper at all times irrespective of the size of said roll, so that the type on the printing-roll will be pressed against the paper, and as the paper-roll is turned by the reeling off of the paper at the forward side of the holder repeated impressions will be made by the type of the printing-roll on the rear side of the roll of paper. The weight of the printing-roll and its frame are sufficient to cause such impressions to be uniformly made whether the roll be large or small, thereby doing away with the necessity of springs for pressing said printing-roll against the paper.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

A printing attachment for paper-roll holders, consisting of a supporting-frame, comprising L-shaped side pieces loosely pivoted at their upper ends to said holder, a printing-roll journaled in the lower ends of said side pieces of said frame and held in engagement with said paper-roll by its weight and that of said supporting-frame, a soft elastic backing secured to said printing-roll, a sheet or band of type of less length than the circumference of the roll arranged on said backing and leaving a space between its ends, a transfer-roll rotatably mounted above said printing-roll and in frictional engagement with the type on said roll, contact-strips arranged on said printing-roll across the space between the ends of said strip of type, friction-bands secured to said transfer-roll to engage said contact-strips, thereby continually rotating said transfer-roll during the turning of said printing-roll, and an ink-roll rotatably mounted in said frame and in frictional engagement with said transfer-roll, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GILBERT D. HORTON.

Witnesses:

H. C. COMEGYS,
F. J. KERNAN.