

W. J. TREMPÉ.

AUTOMATIC FELT TIGHTENER FOR PAPER MAKING MACHINES.

APPLICATION FILED FEB. 17, 1908.

934,857.

Patented Sept. 21, 1909.

Fig. 1.

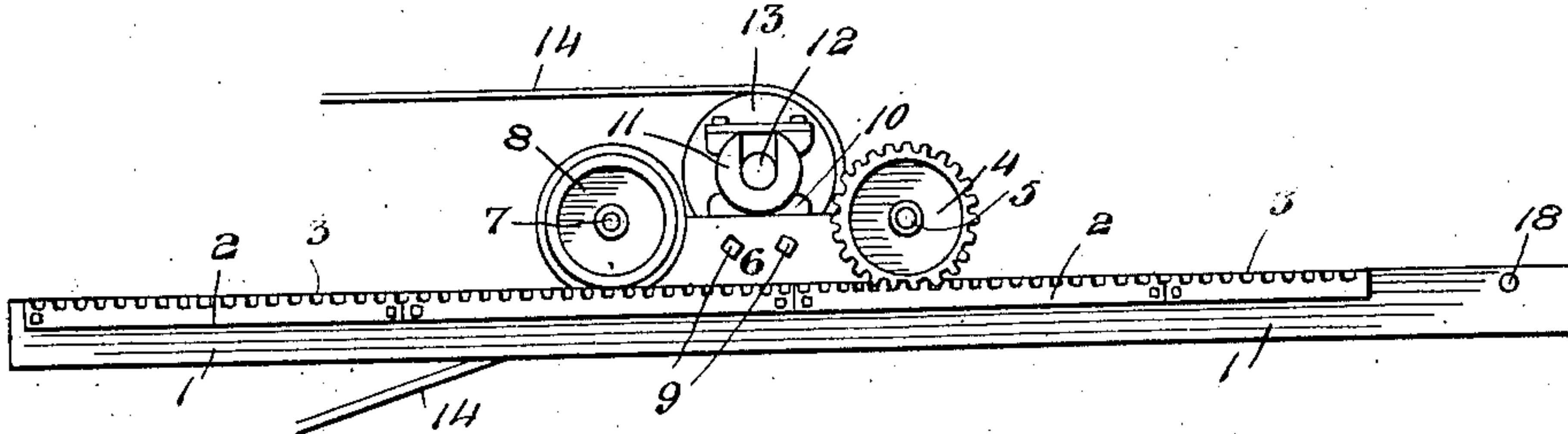


Fig. 2.

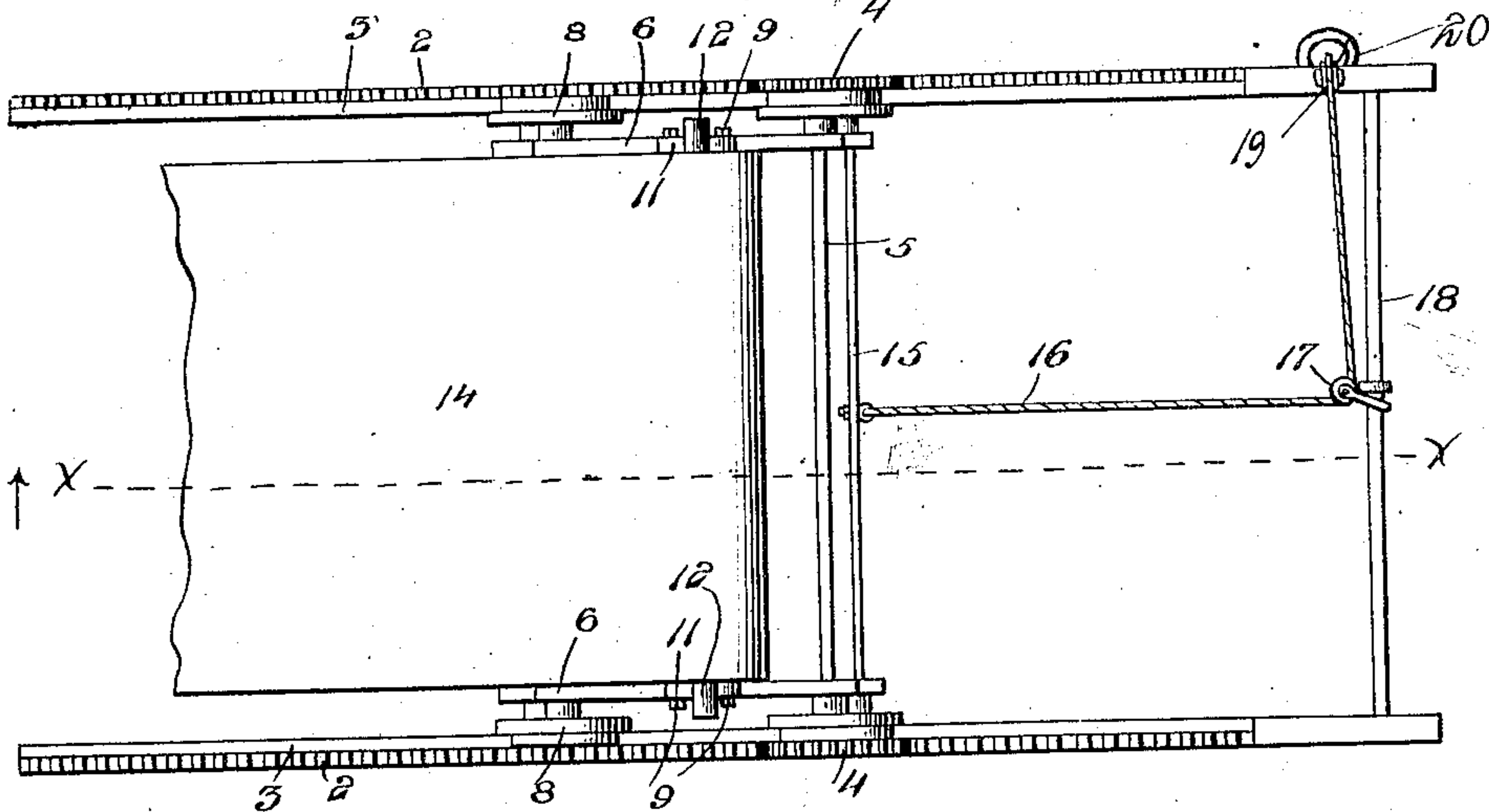
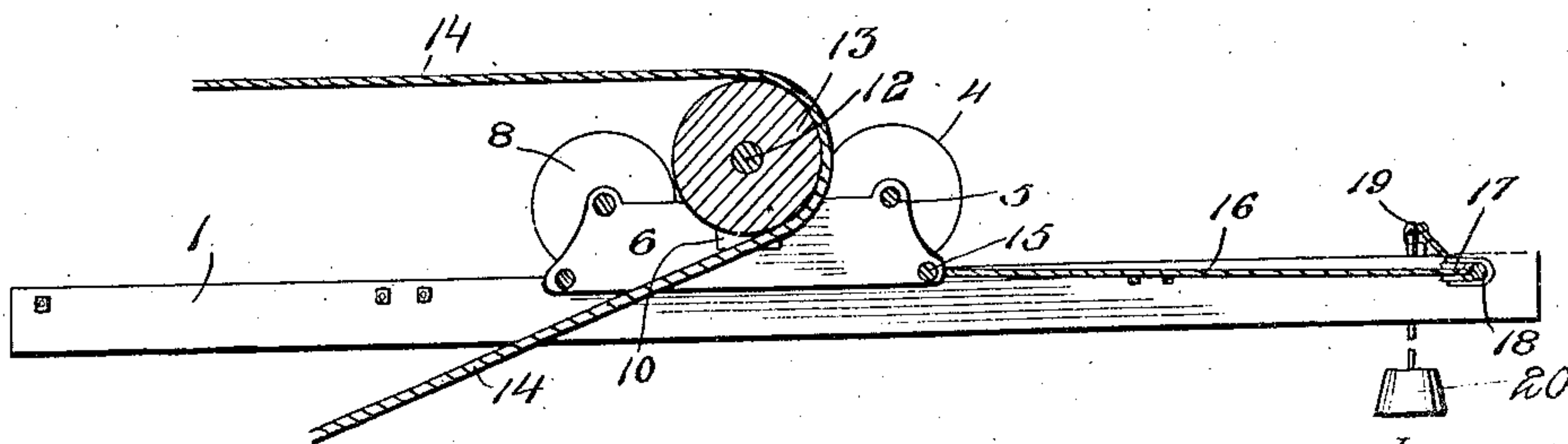


Fig. 3.



WITNESSES:

G. M. Sprang
May E. Moore

INVENTOR
WILLIAM J. TREMPÉ,

BY

David B. Moore.

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM J. TREMPPE, OF EAST RYEGATE, VERMONT.

AUTOMATIC FELT-TIGHTENER FOR PAPER-MAKING MACHINES.

934,857.

Specification of Letters Patent. Patented Sept. 21, 1909.

Application filed February 17, 1908. Serial No. 416,289.

To all whom it may concern:

Be it known that I, WILLIAM J. TREMPPE, a citizen of the United States, residing at East Ryegate, in the county of Caledonia and State of Vermont, have invented certain new and useful Improvements in Automatic Felt-Tighteners for Paper-Making Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

My present invention relates to improvements in automatic felt tighteners for paper making machines, and although it has special reference to felt tighteners on drier felts, I have found it useful in connection with wet felts.

The principal idea of my invention is to keep the felt tight and not have to use the positive screw, as now used, my invention, having a frame and track, which can be attached at any place on the drier frame.

To more clearly illustrate my invention, attention is invited to the accompanying drawings, in which:—

Figure 1 is a side elevation of my invention attached to the upper plates of a paper making machine. Fig. 2 is a top plan view thereof, and Fig. 3 is a longitudinal section taken on line $x-x$ of Fig. 2, looking in the direction of the arrow.

Referring to the drawings:—The numeral 1 designates the upper plates of a paper making machine, to which I attach my toothed racks 2, which are also provided with the smooth surface 3. Adapted to engage the teeth of the racks are the two pinions or gears 4, keyed upon the shaft 5, which passes through the sides 6 of the carriage frame, a shaft 7 being mounted in the opposite end of the frame and carrying the flange wheels 8, which engage the smooth portions 4 of the racks, and hold the carriage against lateral movement.

Adjustably secured to the inner face of the sides 6, by means of bolts 9, is the plate 10, carrying the bearer or hanger 11, for the shaft 12 of the stretching or tightening roll 13, to which is attached the felt 14.

Connected to the frame is a rod 15, to which is connected a pulley cord 16, the said pulley cord passing over a pulley 17, mounted upon the rod 18, and also over a pulley 19, below which it is attached to a balancing weight 20, which at all times has a tendency to move the carriage in the direc-

tion of the arrow, Fig. 1, and thus keep the felt 14 taut.

From the foregoing description taken in connection with the drawings, it is evident that I provide an automatic device whereby the stretching and tightening roll of the paper making machine is evenly stretched or tightened and the breaking of the felt is prevented.

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

1. In combination with a paper making machine, having a pair of tracks mounted upon opposite sides thereof and substantially the full length thereof, each of said tracks having an outer toothed rack and an inner smooth raised track, a carriage having its sides held together by means of transverse rods, a pair of flanged wheels journaled upon the ends of the forward rod exterior of the carriage and fitting upon the inner smooth tracks of the pair of tracks, a pair of toothed wheels meshing with the toothed racks carried upon the ends of the other rod and exterior of the carriage, plates secured to the carriage intermediate of the transverse rods, a roll journaled in said plates, and means connected to the carriage for holding the paper taut between the roll and machine.

2. In combination with a paper making machine, having a pair of tracks mounted thereon the full length thereof, said tracks each having an interior raised smooth portion and an exterior lowered toothed rack, a carriage having two side frames, plates mounted upon the interior of said frames and projecting above the same, a roll journaled in said plates and above and between the frames, a pair of flanged wheels carried by the forward portion of the carriage exterior of the frames mounted upon the raised smooth portion of the tracks, a pair of toothed wheels carried by the rear portion of the carriage exterior of the frames meshing with the toothed rack, and a device for holding the paper taut between the roll and the machine, said device being connected to the carriage.

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

WILLIAM J. TREMPPE.

Witnesses:

RAYMOND L. LILLEY,
EMERY A. AYERS.