

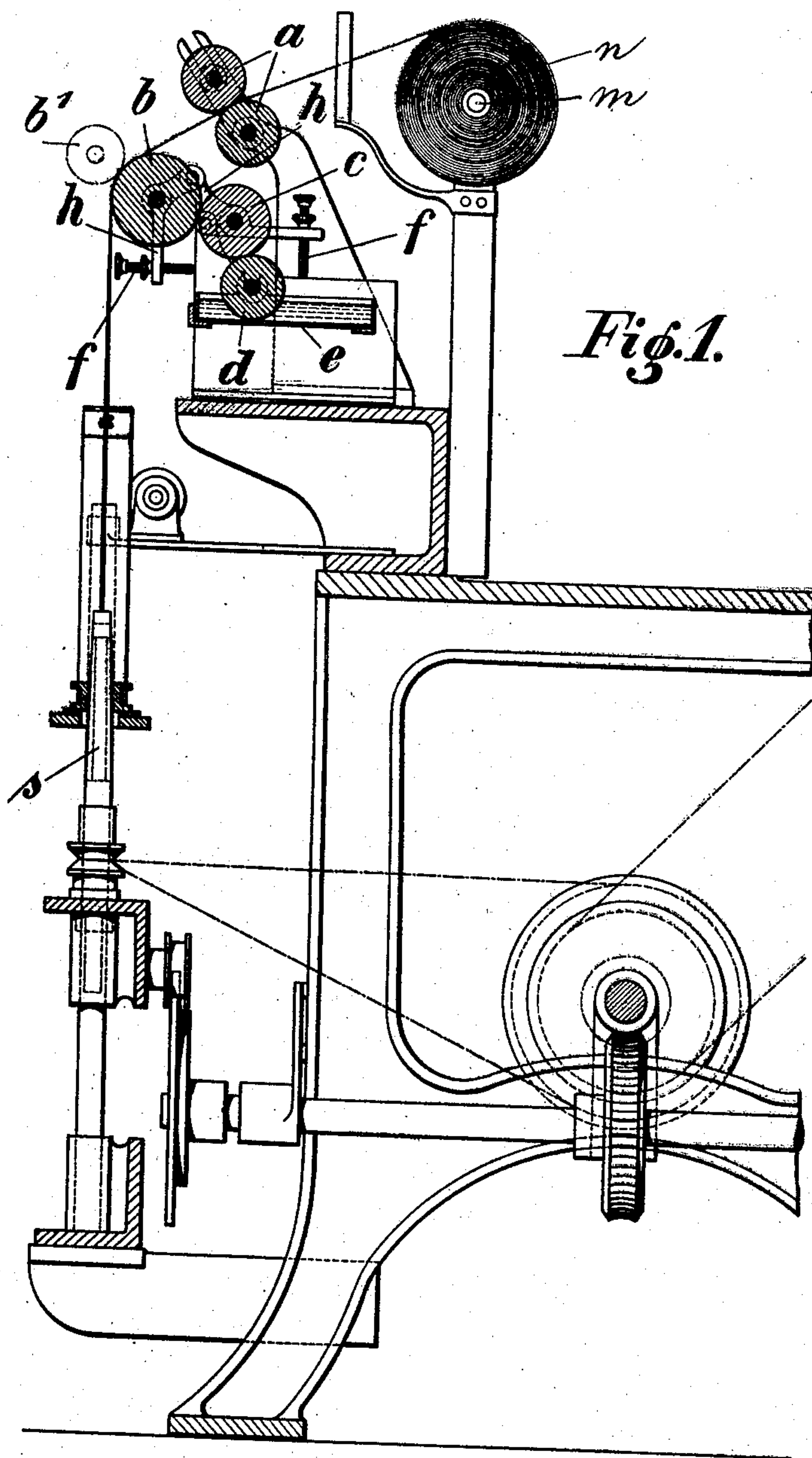
No. 891,545.

PATENTED JUNE 23, 1908.

E. JAGENBERG.
MACHINE FOR SPINNING PAPER STRIPS.

APPLICATION FILED MAY 27, 1907.

2 SHEETS—SHEET 1.



Witnesses:
William Schuck
Adolph Miner

Inventor:
Emil Jagenberg
by his attorney
Frank B. Bieser

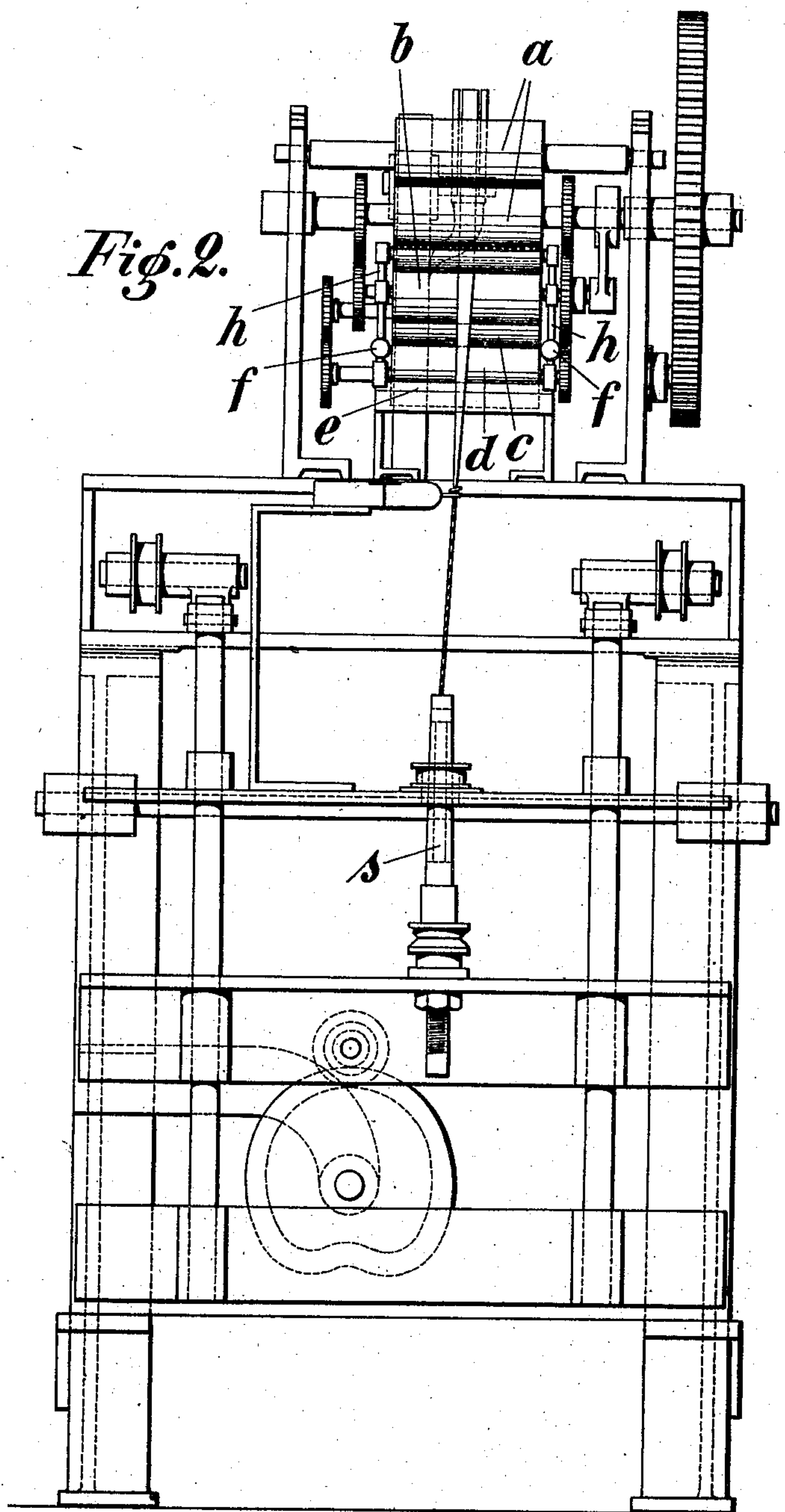
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UNITED STATES PATENT OFFICE.

EMIL JAGENBERG, OF DUSSELDORF, GERMANY.

MACHINE FOR SPINNING PAPER STRIPS.

No. 891,545.

Specification of Letters Patent.

Patented June 23, 1908.

Application filed May 27, 1907. Serial No. 375,785.

To all whom it may concern:

Be it known that I, EMIL JAGENBERG, a subject of the German Emperor, residing at Dusseldorf, Germany, have invented new and useful Improvements in Machines for Spinning Paper Strips, of which the following is a specification.

As heretofore practised, paper strips dried in the usual manner and wound on rollers were steeped in water before the commencement of the spinning operation. They were then taken out of the water and the moist strips from these rolls were rounded by friction, or the strips were drawn, by means of delivery rollers, through a bath and carried, by the guide rollers, to the spindle. By this method the strips become too moist and the point at which the moistening takes place is at too great a distance from the spindle, which has the disadvantage that the paper strips are apt to adhere to parts of the machine and, in consequence of their loose nature, they are easily stretched to excess and break. It is, therefore, impossible by this method to spin very thin, narrow strips of paper, so that sufficiently fine threads cannot be made. It is intended, by the contrivance shown in the accompanying drawings, to render this possible, and it is not only possible to spin threads so fine that, for example, comparatively fine fabrics can be made, but the paper threads, by the paper being allowed to remain in better cohesion before spinning, are rendered stronger than by the old method. The new spinning machine is thereby characterized, that the paper strips, after leaving the delivery rollers and just before being run on the spindle, run over a damping roller, to which moisture is communicated by other rollers which are adjustable with relation to one another, so that the measure of moisture can be regulated to a fine degree.

In the accompanying drawings: Figure 1 is a vertical section of my improved spinning machine, and Fig. 2 a front elevation thereof.

As the drawing shows, the spinning machine is furnished in the usual manner, with a peg *m* for the reception of the paper-strip wound into a roll *n*. Beyond this peg are the

delivery rollers *a*, and beyond rollers *a*, is the damping roller *b*, above or besides which a pressure roller *b'* may be employed. The liquid for moistening is contained in a reservoir *e*, in which the take up roller *d* runs. The transmission roller *c* runs against the latter and communicates the moisture to the roller *b*, and the bearings of the rollers *c* & *b* are in levers *h* which are provided with adjusting screws *f*, by means of which the space between the rollers *c* & *b* can be regulated perfectly. The smaller the space between the rollers *b*, *c* & *d*, the less moisture will be taken by the roller *b*, because the moisture taken up by the roller *d* out of the reservoir, is pressed out, more or less, by the roller *c*, or the roller *b* if required, so that it flows back into the reservoir. This adjustment is made according to the kind of paper used and the yarn to be spun. The spinning of the paper is performed in the usual manner, by the spindle *s*, which is placed vertically below the damping roller in such a manner that its axis extends substantially tangential to the roller. In this way no additional means are necessary for properly guiding the moistened paper strips from the damping roller towards the spindle, so that any tearing of the strips is prevented.

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

1. In a device of the character described, a pair of feed rollers adapted to advance a paper strip, a damping roller in front of the feed rollers, and a spinner, the axis of which extends substantially tangential to the damping roller, as specified.

2. In a device of the character described, a pair of feed rollers adapted to advance a paper strip, a damping roller in front of the feed rollers, adjustable means for applying moisture to the damping roller, and a spinner below the latter, the axis of the spinner extending substantially tangential to the damping roller, as specified.

3. In a device of the character described, a pair of feed rollers adapted to advance a paper strip, a moisture reservoir, a take up roller journaled therein, a transmission roller

adjustably engaging the take up roller, a
damping roller adjustably engaging the
transmission roller and arranged in front of
the feed rollers, and a spinner below the
5 damping roller, the axis of which extends
substantially tangential to the damping
roller, substantially as specified.

Signed by me at Dusseldorf, Germany, this
sixth day of May, 1907.

EMIL JAGENBERG.

Witnesses:

ALFRED POHLMAYER,
M. ENGELS.