

No. 708,740.

Patented Sept. 9, 1902.

F. SCHÖN.  
MANDREL FOR PAPER ROLLS.

(Application filed Oct. 1, 1901.)

(No Model.)

FIG. 1.

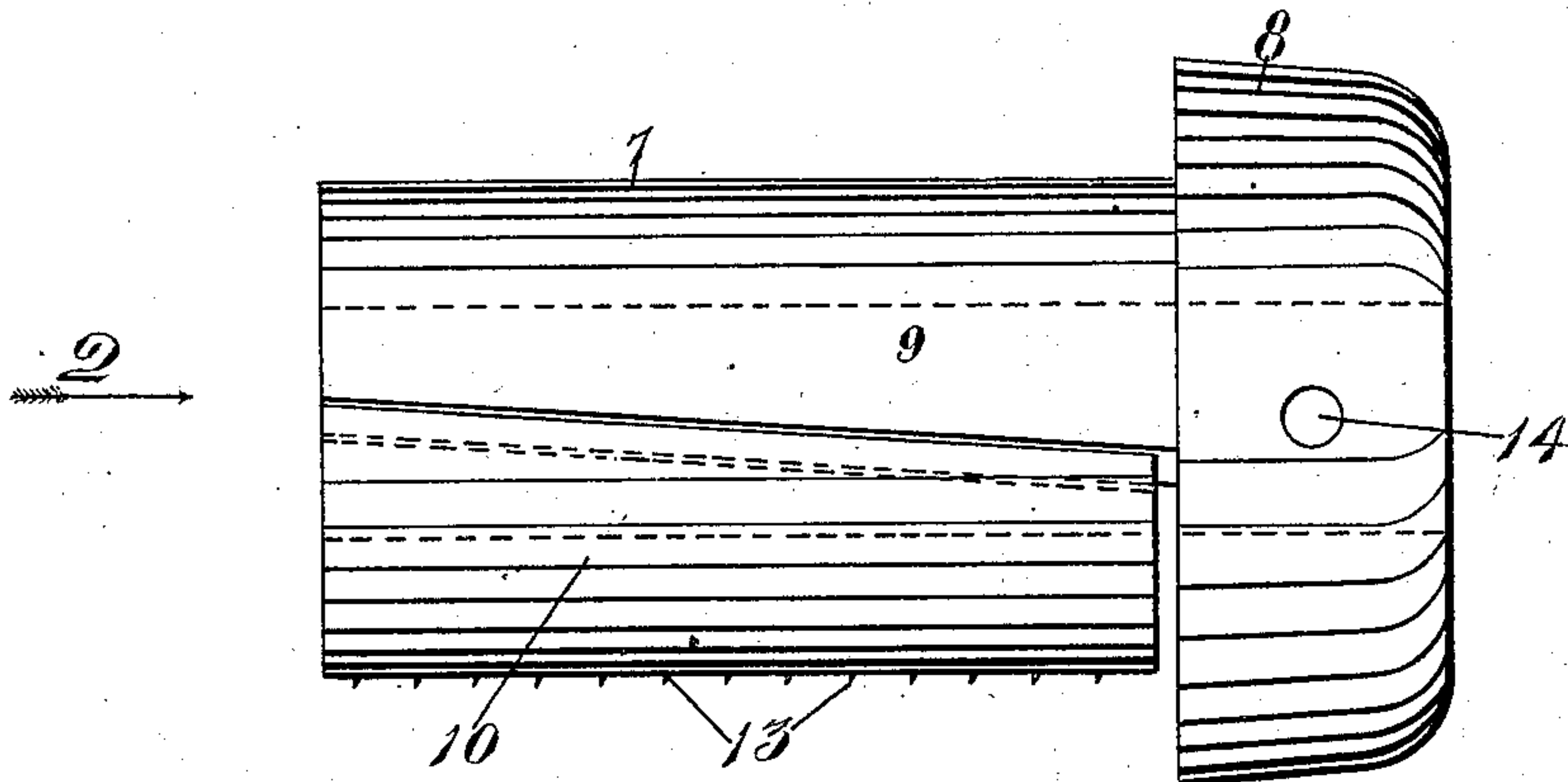


FIG. 2.

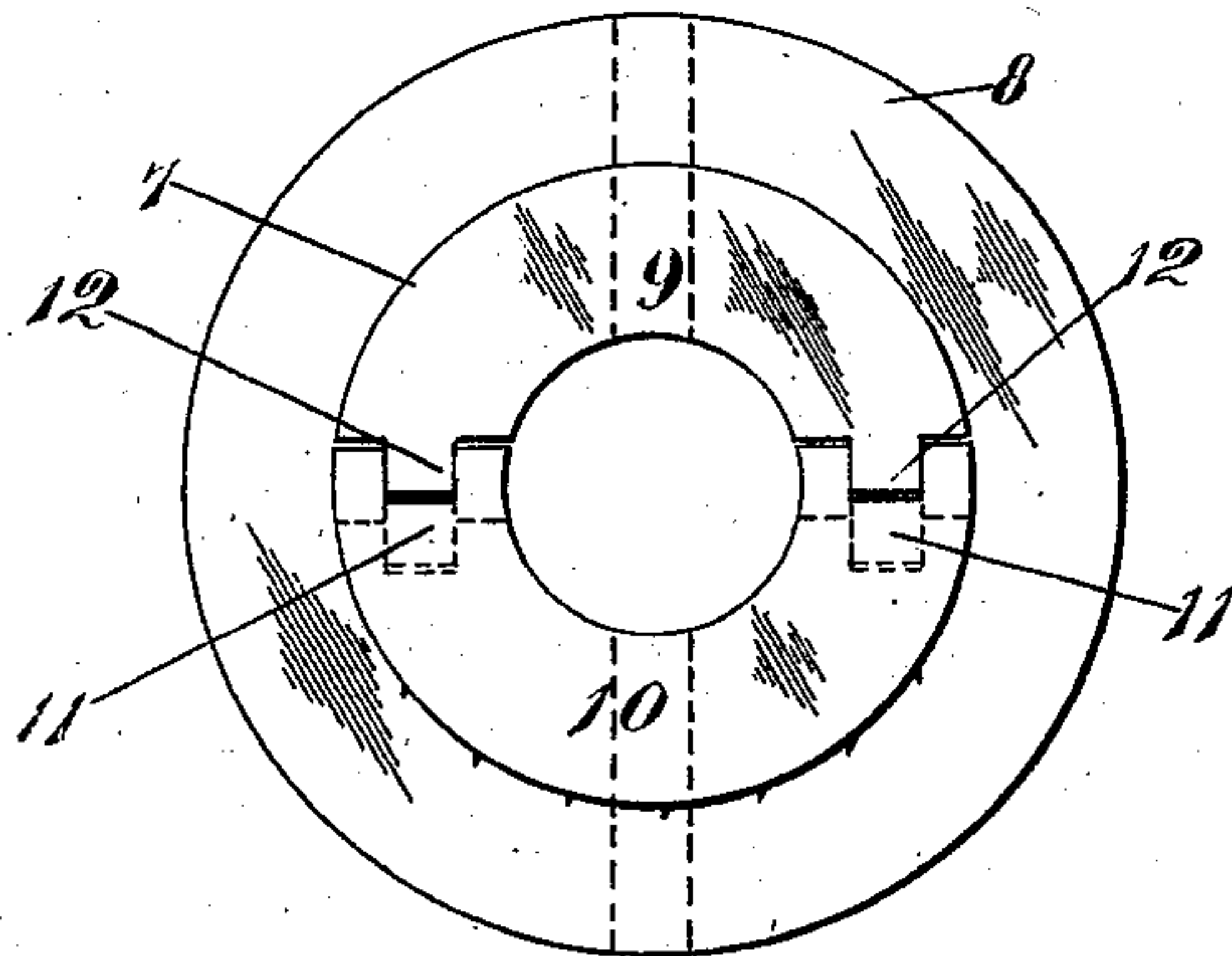
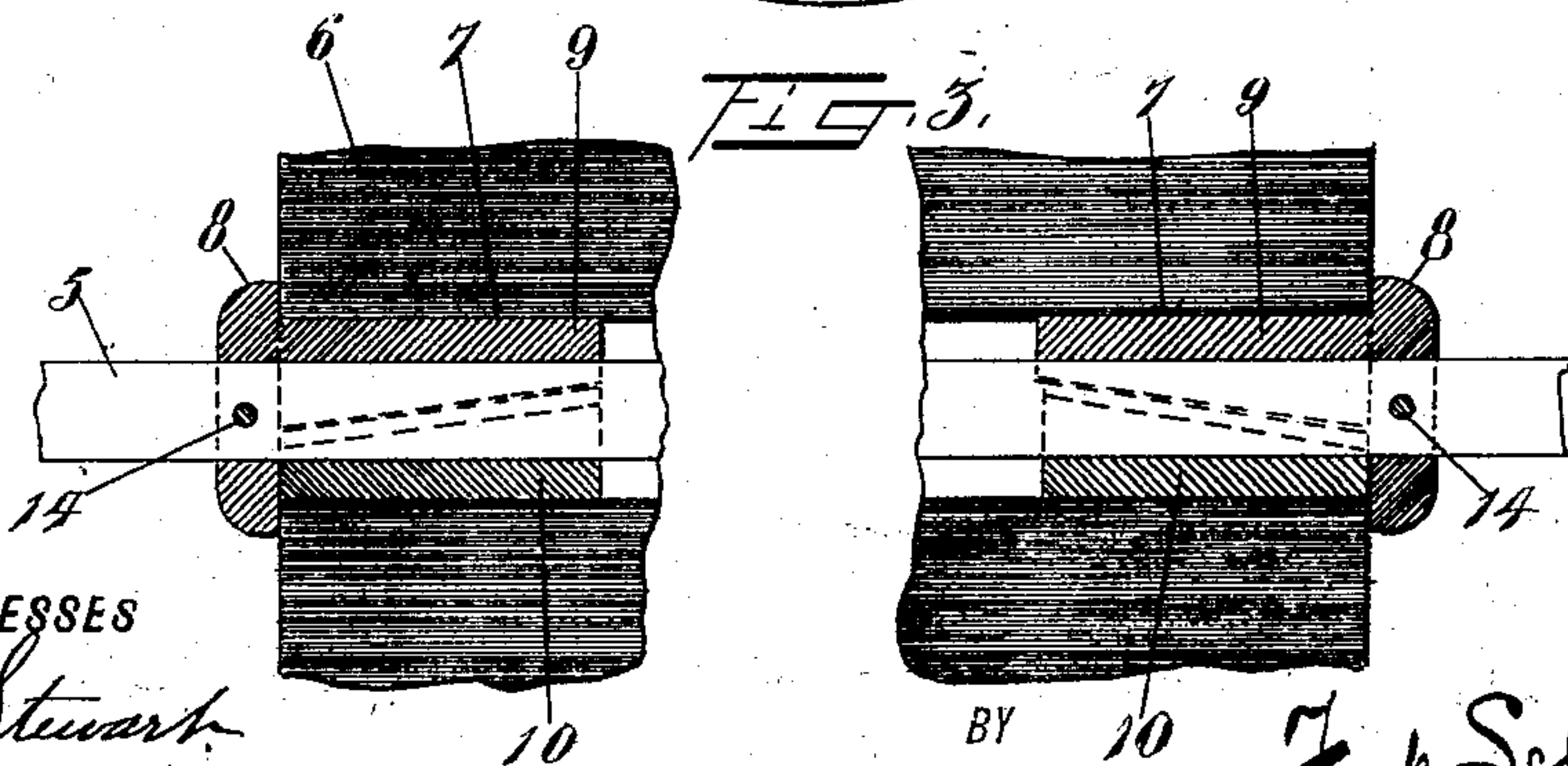


FIG. 3.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## MANDREL FOR PAPER-ROLLS.

SPECIFICATION forming part of Letters Patent No. 708,740, dated September 9, 1902.

Application filed October 1, 1901. Serial No. 77,178. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK SCHÖN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Mandrels for Paper-Rolls, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide improved means for connecting a roll of paper with a supporting shaft or mandrel in printing-machines as now constructed. It is a well-known fact that printing-machines of the usual form, such as the web-machine, are provided with a shaft at the front thereof on which a roll of paper is placed, and various means have heretofore been applied for connecting the roll of paper with this shaft so as to secure the proper action of the parts and so as to make the proper connection between the paper-roll and the shaft; but these devices have up to the present time been more or less unsuccessful, and it is to remedy present defects in this connection that my improvement is provided.

In the drawings forming part of this specification, in which my invention is fully disclosed, and in which drawings the separate parts of my improvement are designated by suitable reference characters in each of the views, Figure 1 is a side elevation of a thimble or plug which I employ and one of which is adapted to be inserted into each of the ends of a roll of paper and through which the paper-shaft is passed; Fig. 2, an end view thereof looking in the direction of the arrow 2; Fig. 3, a sectional side view showing a paper-roll shaft and a roll of paper mounted thereon and provided with my improvement.

In the drawings forming part of this specification, reference being made to Fig. 3, I have shown at 5 a paper-roll shaft similar to that with which all printing-machines as now constructed are provided, and I have also shown at 6 a roll of paper, and in the practice of my invention I provide two thimbles or socket-sleeves 7, which are adapted to be inserted into the opposite ends of the roll of paper and each of which comprises a body portion and an annular head portion 8, the

body portion being divided longitudinally into two parts 9 and 10. The separate parts 9 and 10 of the body of the thimbles or socket-sleeves 7 are wedge-shaped in form at their adjacent sides, as clearly shown, and the sides of one part are provided with grooves 11 and the sides of the other part with corresponding tongues 12, which fit in said grooves, and the annular head 8 is formed on one of the parts of the socket-sleeve or thimble, as is also clearly shown in Fig. 1. In placing these thimbles or socket-sleeves in the ends of a roll of paper the part which has no head, or that part indicated by the reference-numeral 10 and which is provided with teeth or projections 13, is first placed in the end of the roll, after which the other part is placed thereon and driven into the roll. This operation secures the thimbles or socket-sleeves in the ends of the paper-roll, and the shaft 5 is then passed therethrough in the usual manner, and the thimbles or socket-sleeves are secured to the shaft by a screw at 14 passing through the annular head 8 or in any desired manner.

My improvement is not limited to the material of which the thimbles or socket-sleeves are made nor the exact form thereof; but in practice I prefer to provide the part of said thimbles or socket-sleeves which has no head with teeth or projections 13 or other equivalent formations which prevent the thimbles or socket-sleeves from turning in the roll of paper.

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

1. The herein-described thimbles or socket-sleeves for use in connecting a roll of paper with a shaft or mandrel which is passed there-through, said thimbles or socket-sleeves comprising a body portion composed of two parts, the adjacent side edges of which are inclined or wedge-shaped in form, one of said parts being also provided with an annular head, and means for preventing the roll of paper from turning on said thimbles or socket-sleeves, substantially as shown and described.

2. The herein-described thimbles or socket-sleeves for use in connection with a roll of paper and through which a shaft or mandrel is passed, said thimbles or socket-sleeves com-

prising a body portion composed of two parts,  
the adjacent side edges of which are inclined  
or wedge-shaped in form, one of said parts  
being provided with an annular head, and  
5 that part which has no head being provided  
with projections or teeth on its outer surface,  
substantially as shown and described.

In testimony that I claim the foregoing as

my invention I have signed my name, in pres-  
ence of the subscribing witnesses, this 28th 10  
day of September, 1901.

FRANK SCHÖN.

Witnesses:

F. A. STEWART,

F. F. TELLER.