

No. 826,841.

PATENTED JULY 24, 1906.

C. D. FRANCE.
JACKET FOR ROLLS.

APPLICATION FILED FEB. 9, 1905.

Fig. 1.

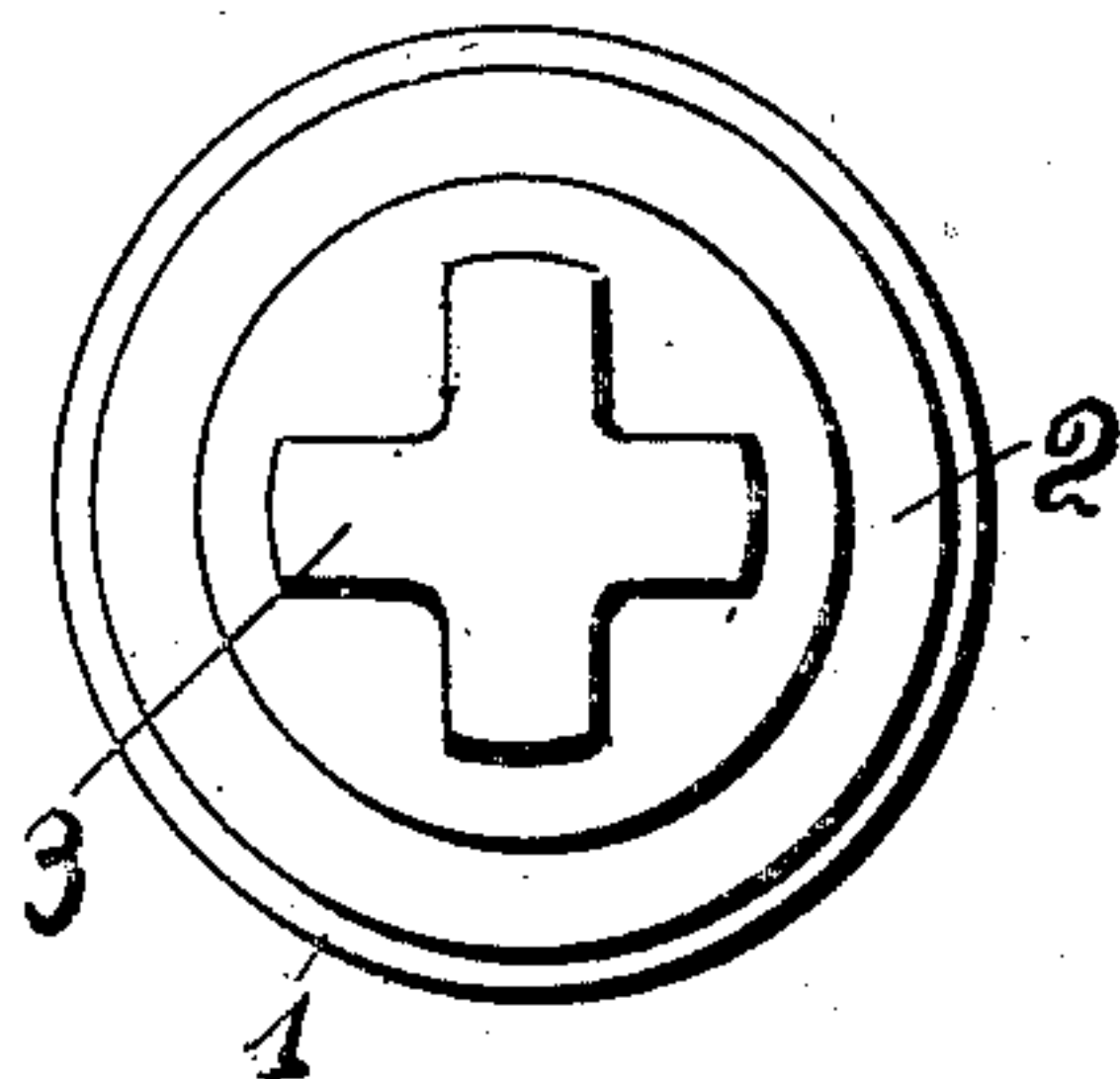


Fig. 2.

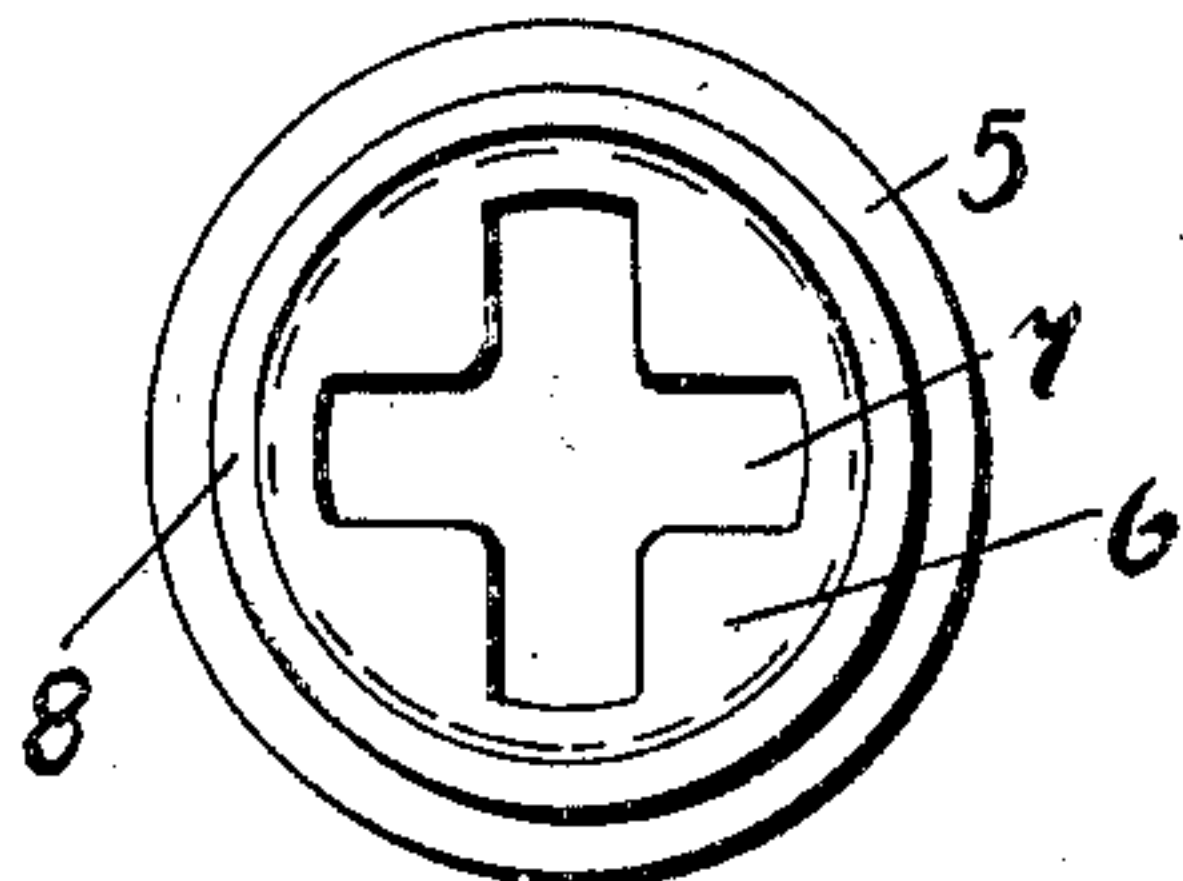
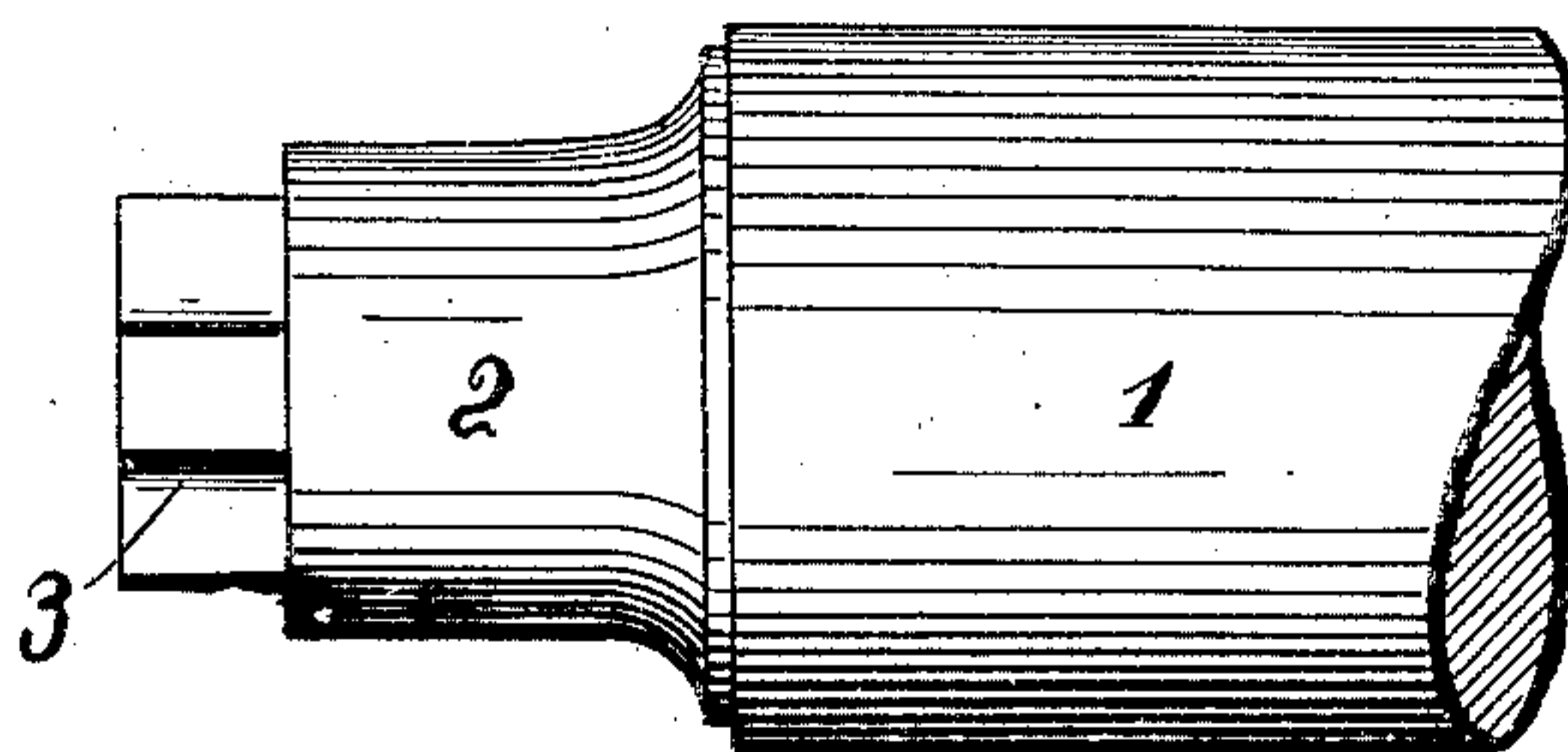


Fig. 3.

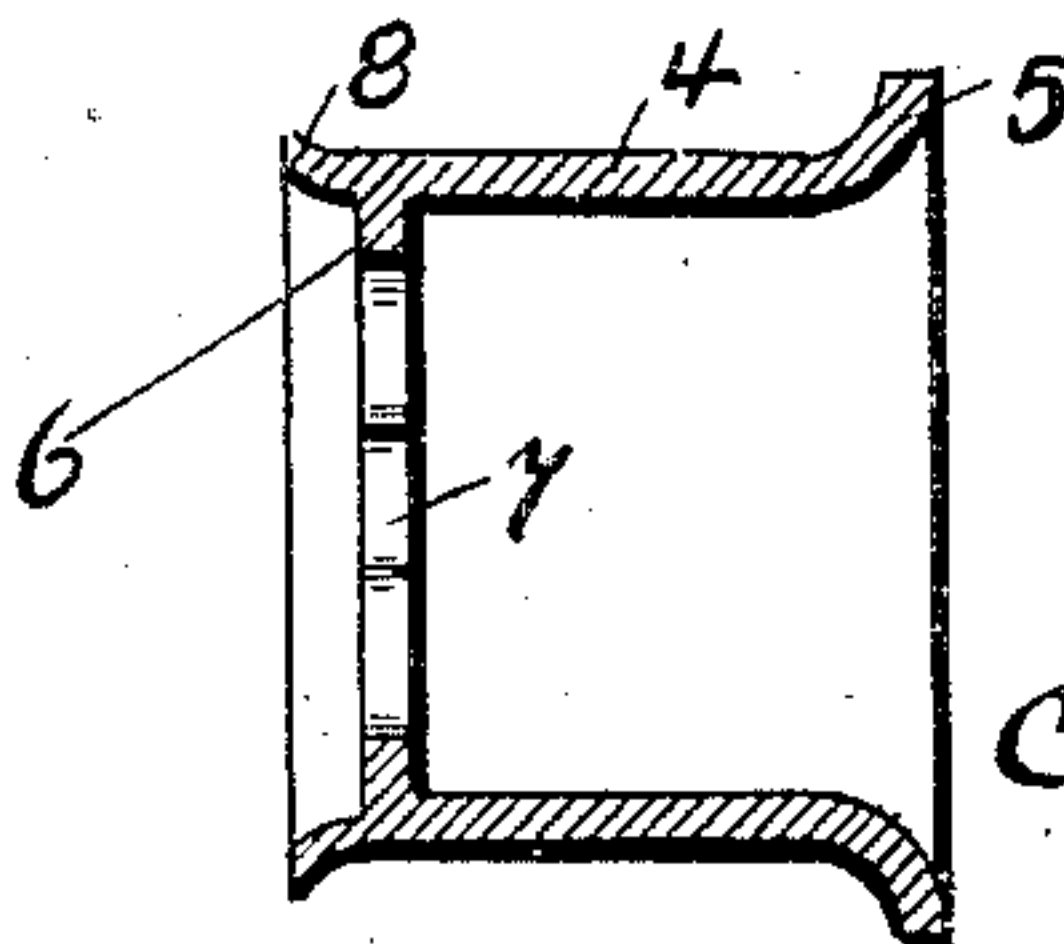


Fig. 4.

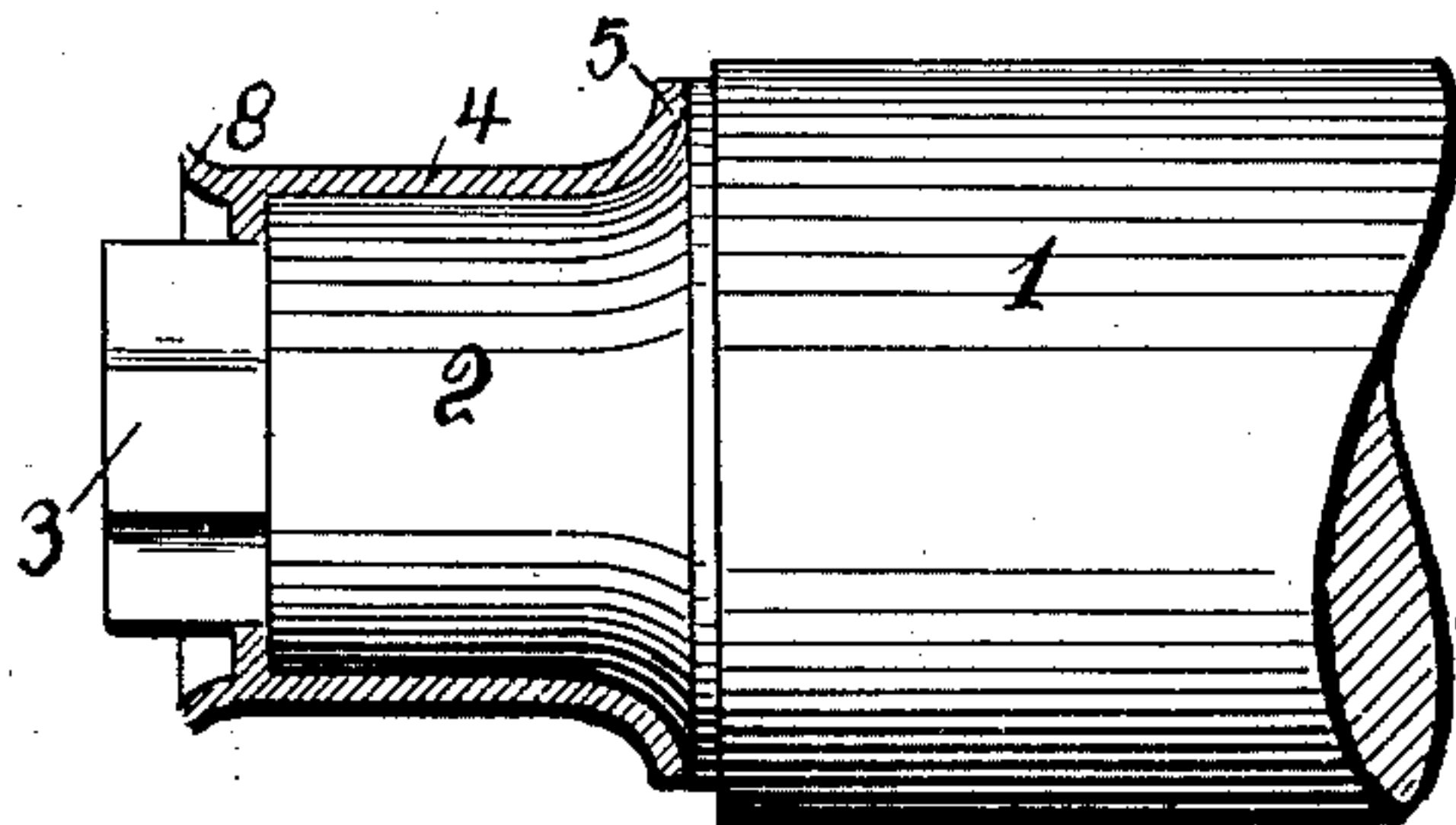


Fig. 5.

Witnesses:
C. D. France
H. A. Butler,

Inventor.
C. D. France.
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Attorneys.

UNITED STATES PATENT OFFICE.

CLAUD D. FRANCE, OF VANDERGRIFT, PENNSYLVANIA.

JACKET FOR ROLLS.

No. 826,841.

Specification of Letters Patent.

Patented July 24, 1908.

Application filed February 9, 1905. Serial No. 244,986.

To all whom it may concern:

Be it known that I, CLAUD D. FRANCE, a citizen of the United States of America, residing at Vandergrift, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Jackets for Rolls, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in rolls, and more particularly to a jacket adapted to be mounted upon said rolls.

The invention aims to provide a jacket which can be readily mounted upon the necks of a roll to protect the same when being cooled.

The neck of a roll when revolving within its housing becomes heated by the frictional contact of the neck with the brass boxes, and this heat has a tendency to fuse the neck of the roll, distort the same, interfere with the rotation of the roll, and finally render the same useless. In rolling-mills the heat generated by the rotation of the necks of a roll is reduced considerably by feeding cold water upon the same, and this manner of cooling the necks of a roll has also proven to be injurious to the necks and to finally ruin the material from which the necks are formed.

By the provision of a novel form of metallic jacket, which is composed of brass or other suitable and substantially non-oxidizable metal and which can be fitted over the neck of a roll and will turn therewith, I have devised means for preventing water from contacting with the neck of the roll while it is being cooled, and the many advantages of my improved jacket will be apparent to those skilled in the art of manipulating rolls.

Another object of my invention is to provide a device wherein the lubricant may be economically used. In rolls of this character when the same become highly heated much grease or other lubricants are consumed; but with my improvements the cost of lubricants is reduced to a minimum and a great saving is accomplished.

It will also be noted that I obtain a great saving in the wearing of the journals and the breaking of the same, such as a saving of Babbitt metal, bronzes, brass, and the like, that is used in the journals for the necks of the rolls.

With the above and other objects in view the invention finally consists in the novel

construction, combination, and arrangement of parts, which will be hereinafter more fully described and then specifically pointed out in the claims, and, referring to the drawings accompanying this application, like numerals of reference designate corresponding parts throughout the several views, in which—

Figure 1 is an end view of a roll. Fig. 2 is a side elevation view of a portion of a roll. Fig. 3 is an end view of my improved jacket. Fig. 4 is a vertical sectional view of the same; and Fig. 5 is a side elevation view of a portion of a roll, illustrating my improved jacket mounted upon the neck thereof.

To put my invention into practice and to demonstrate the practical use of my improved jacket, I have illustrated the same as being used in connection with a roll 1, having a neck 2 and a wabblers 3.

My improved jacket consists of a sleeve or collar 4, having a flared end 5. The opposite end of the jacket is partially closed, as indicated at 6, this end being formed with an opening 7, said opening having a contour substantially that of the wabblers 3 in cross-section. The jacket is also provided with an annular flared flange 8, which forms a shelf for protecting the coupling-box, which is connected to the wabblers 3.

The jacket is adapted to be mounted upon the neck 2 of the roll, as illustrated in Fig. 2 of the drawings, and it will be observed that the flared end 5 of the jacket fits neatly upon the neck and in close proximity to the body portion of the roll 1.

The jacket, as hereinbefore stated, is adapted to turn with the neck of the roll and is formed of brass or other suitable and non-oxidizable material, the jacket and the roll turning together in the housing.

The partially-closed end 6 of the jacket is adapted to embrace the end of the neck and the wabblers 3, and when the wabblers is mounted in a coupling-box the annular flange 8 is adapted to engage the coupling box and prevent the water that may be sprayed upon the jacket from entering the coupling-box.

My improved jacket protects the necks of a roll from the water that is sprayed upon the same, and as the jacket receives the water it is cooled and gradually cools the neck of the roll 2 and prevents the material from which the neck is formed from being injured. The annular flange 8 prevents any water from

passing onto the wabblers 3, and as the construction of my improved jackets is extremely simple they can be readily renewed from time to time without incurring any considerable expense.

It will be noted that various other changes may be made in the details of construction without departing from the general spirit and scope of the invention.

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

1. A jacket for rolls comprising a collar having a flared end, the opposite end of said collar being partially closed, and an annular flange carried by said end, substantially as described.

2. In a device of the type described, the combination with the necks of rolls, of jackets adapted to fit upon said necks and having one end partially closed, the opening therein conforming to the shape of and being adapted

to embrace the wabblers of said rolls, said jackets being connected with the rolls so as to turn therewith, and having an annular flange adjacent said partially-closed end thereof, substantially as described.

3. The combination with the neck of a roll, of a jacket adapted to fit upon said neck, said jacket having a partially-closed end adapted to embrace the wabblers of said roll, said jacket being connected with the roll so as to turn therewith and means carried by said jacket to protect said wabblers from water sprayed upon said jacket, substantially as described.

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

CLAUD D. FRANCE.

Witnesses:

RAY M. FRANCE,
S. M. GIST.