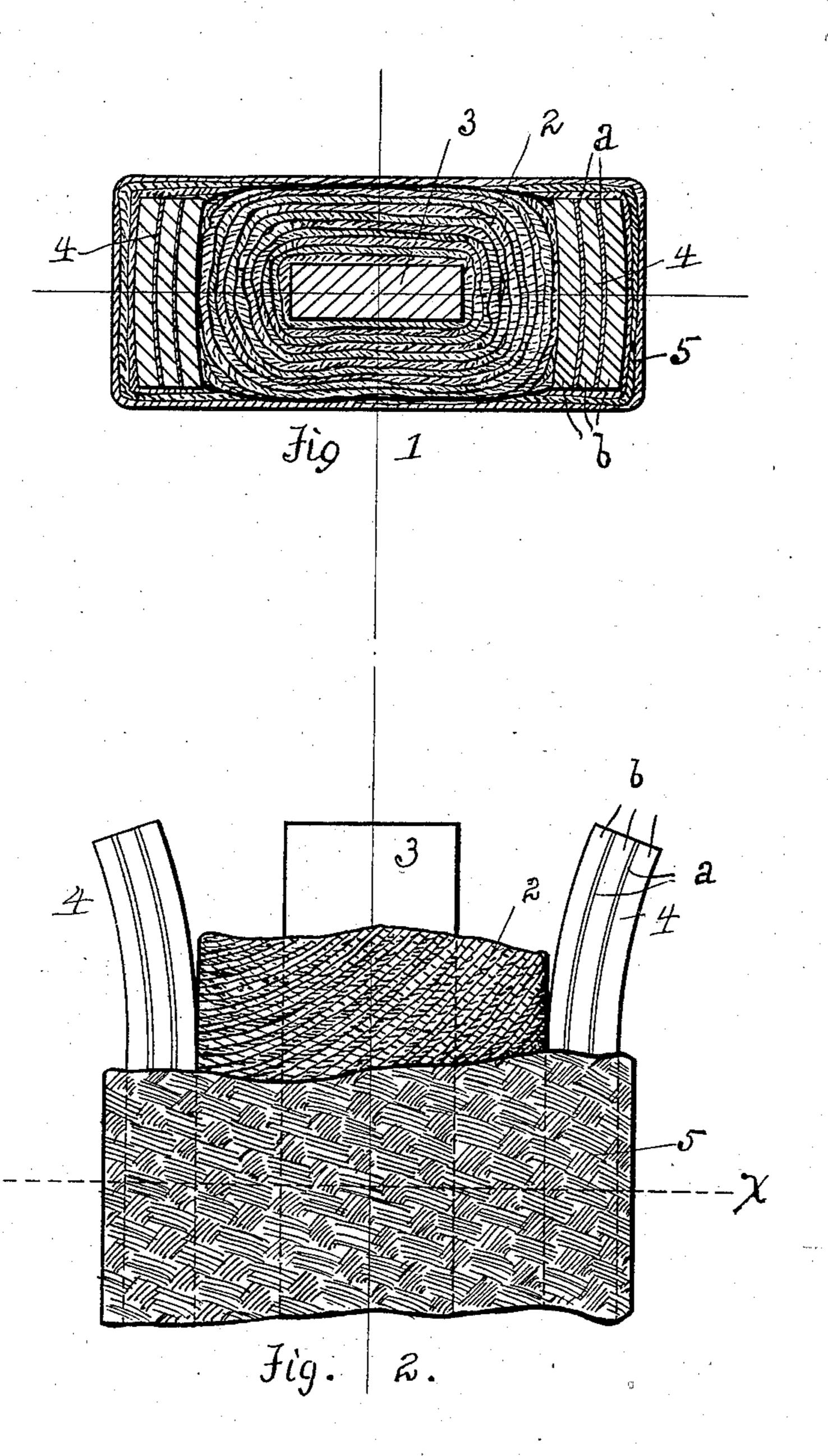
## C. H. MILLER. PACKING.

(Application filed July 27, 1900.)

(No Modei.)

2 Sheets—Sheet 1.



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Inventor-Charles Hartley Miller per Mark Wilks bottel. atty: No. 664,487

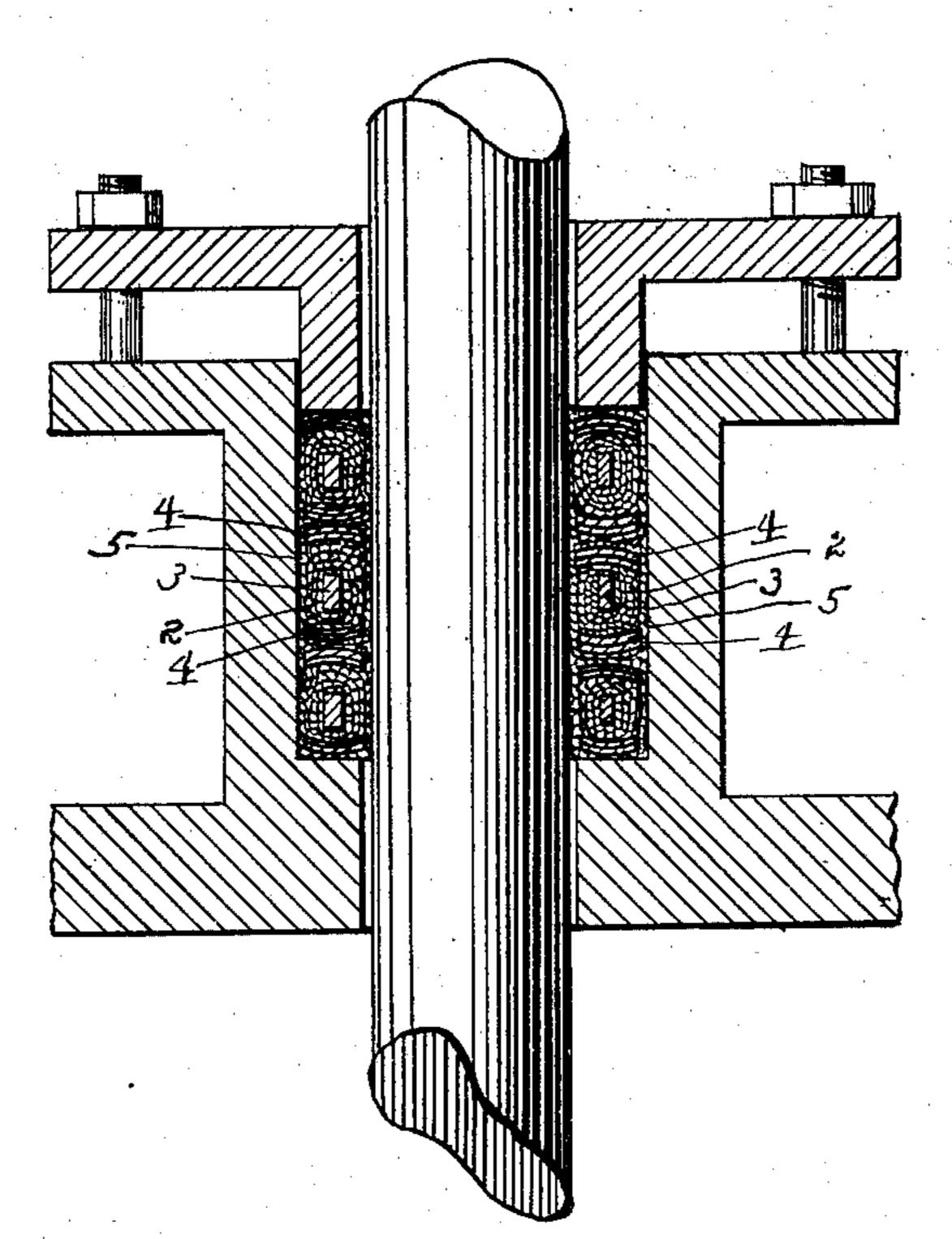
Patented Dec. 25, 1900.

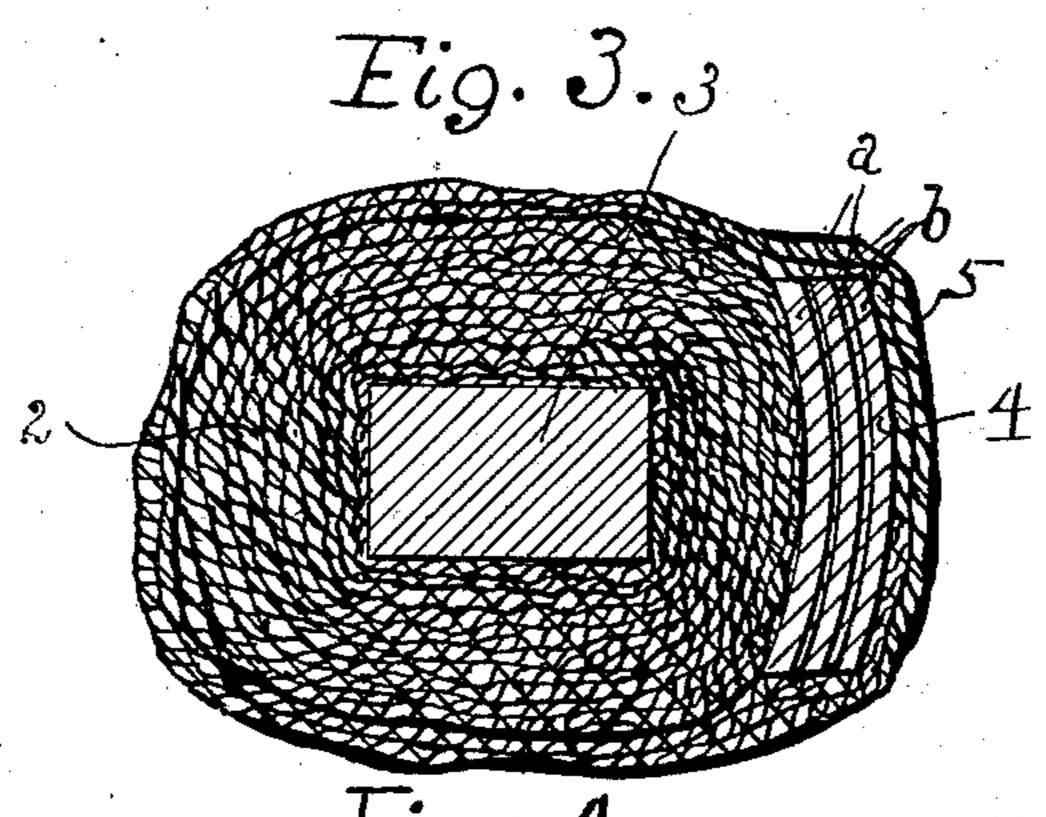
C. H. MILLER. PACKING.

Application filed July 27, 1900.

(No Model.)

2 Sheets—Sheet 2.





Witnesses But. R. Rogers Suventor Charles Hartley Muller by his altorney in fact bullet.

## United States Patent Office.

CHARLES HARTLEY MILLER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO EDWARD G. WEBB, OF SAME PLACE.

## PACKING.

SPECIFICATION forming part of Letters Patent No. 664,487, dated December 25, 1900.

Application filed July 27, 1900. Serial No. 24,983. (No specimens.)

To all whom it may concern:

Be it known that I, Charles Hartley Mil-Ler, a citizen of the United States, and a resident of the city and county of Philadelphia, 5 in the State of Pennsylvania, have invented a certain new and useful Improvement in Packing, of which the following is a clear, full, and sufficient specification, reference being had to the drawings annexed.

My packing is intended to obviate the necessity for the introduction of washers between the rings or spirals of packing, thus facilitating the insertion and removal of the packing, preserving its integrity and softness better than can be accomplished by any known construction, and obtaining various other advantages, which will appear upon reading the detailed portion of my specification.

Figure 1 is a cross-section on line x x of Fig. 2, and Fig. 2 is a side elevation of the packing. Fig. 3 is a sectional view of a stuffing-box, showing the packing therein. Fig. 4 is a sketch of a modification.

4 is a sketch of a modification. The packing proper, which lies between the two buffer or washer strips 44, is made of the inner core 3, which is preferably a piece of soft rubber and is oblong in cross-section, as shown, or of sufficiently yielding material to 30 take that shape when introduced into the stuffing-box, and the textile covering 2 for this core, which may be made of any suitable textile material, but is most suitably formed of a series of layers braided around the core in 35 a braiding-machine. At either side of this braided material are placed the buffer or washer strips 4 4, which act to separate the rings or spirals of packing lying next each other from each other and which obviate 40 the necessity for the introduction of washers separate from the packing between the rings or spirals of packing introduced into the packing-box. The necessity of washers to keep

the packing intact under the exigencies of the present practice, where the gland is driven down hard and the face of the packing forced hard against the rod, and the great inconvenience and difficulty of introducing them, es-

pecially where the box is stuffed with a spiral of packing, are so well known that it is not 50 necessary to speak further of them. These washer or buffer strips 4 4 extend the length of the strip of packing, and their width is sufficient to extend substantially from one face to the other of the packing. They are preferably formed of rubber cloth—that is, vulcanized rubber, as b, with layers of cloth, as a, inserted therein—or of rubber duck or other material that is pliable, but sufficiently stiff for the purpose. Around the packing and the 60 washer-strips is the textile material 5, which can be braided around them.

The cover 5 is usually soon worn off from the rod-face of the packing; but as its main function is to hold the washer-strip in place 65 until it is inserted in the stuffing-box this

does no harm to the packing.

Fig. 4 is a sketch in which only one washerstrip is shown at the side of the packing. This is not as good a form as that shown in the 70 other figures, because if the packing is not inserted carefully two pieces of packing may get adjacent to each other without the interposition of a washer-strip. These washer or buffer strips, extending, as they do, substantially from the rod-face to the box-face of the packing, will keep the strips of packing separate from each other, so that even if the packing gets worn so that it has to be removed by a hook the packing will come out in strips 80 instead of in small lumps and pieces.

Having now fully described my invention, what I claim, and desire to secure by Letters

Patent, is—

1. A packing consisting of the packing 85 proper, having the core formed of a piece of rubber, oblong in cross-section, when in the stuffing-box, covered with textile material, and a washer-strip, made of a flexible but fairly stiff material, placed at the side of said 90 packing proper, and extending in width substantially from the rod-face to the box-face of the packing, and a textile cover inclosing both the packing proper and the washer-strips, substantially as described.

2. A packing consisting of the packing

proper and having the core formed of a piece of soft rubber, oblong in cross-section when in the stuffing-box, and covered with textile material, and washer-strips made of a flexible but fairly stiff material, and placed at either side of the packing proper, and extending in width substantially from the rod-face to the box-face of the packing and a textile cover

inclosing both the packing proper and the washer-strips, substantially as described.

In witness whereof I have hereunto set my hand this 3d day of July, 1900.

CHARLES HARTLEY MILLER.

Witnesses:

M. W. COLLET, GEO. W. REED.