

No. 864,063.

PATENTED AUG. 20, 1907.

P. S. BAUER.
SPOOL ADHESIVE PLASTER.
APPLICATION FILED AUG. 19, 1906.

Fig. 1.

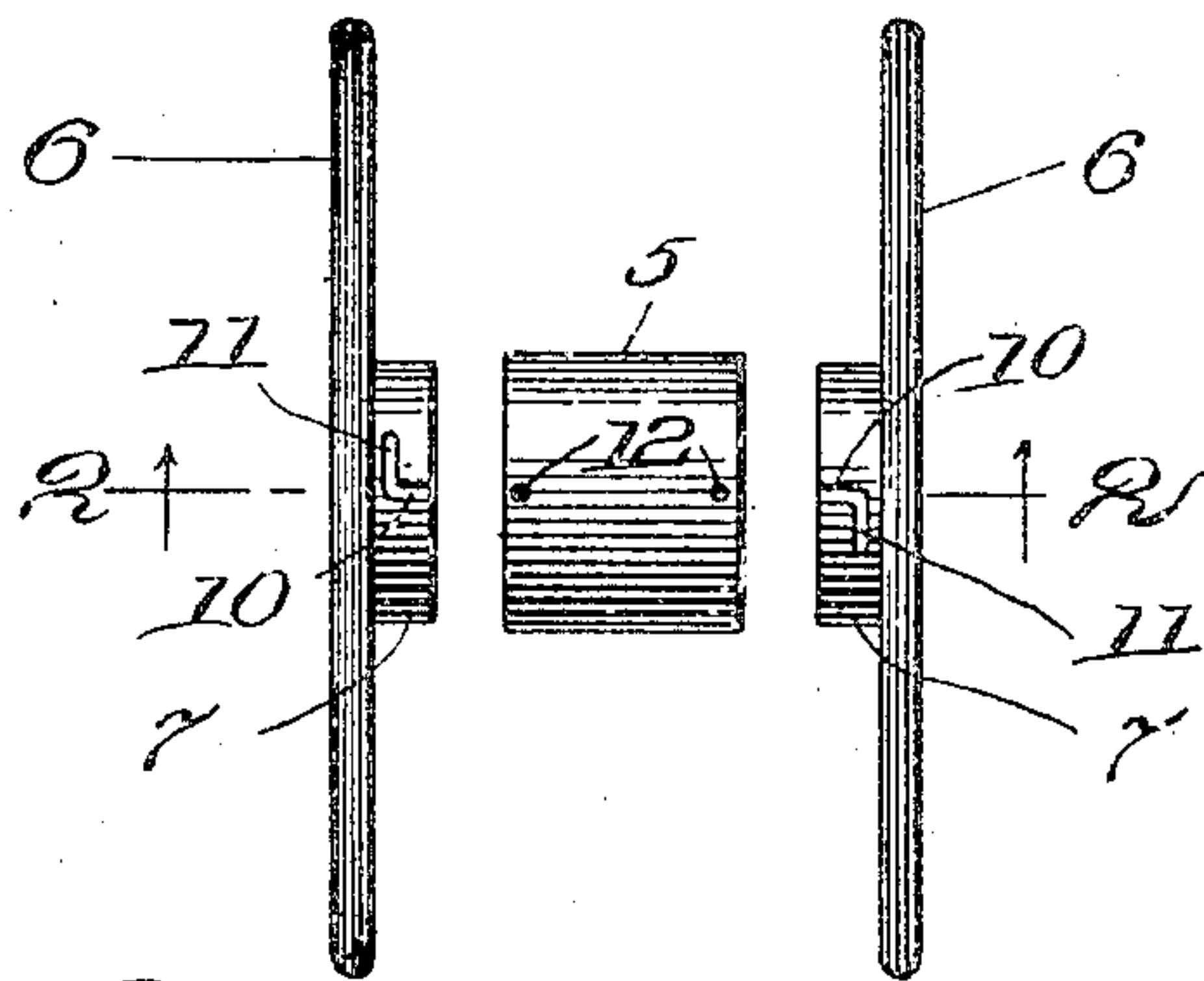


Fig. 2.

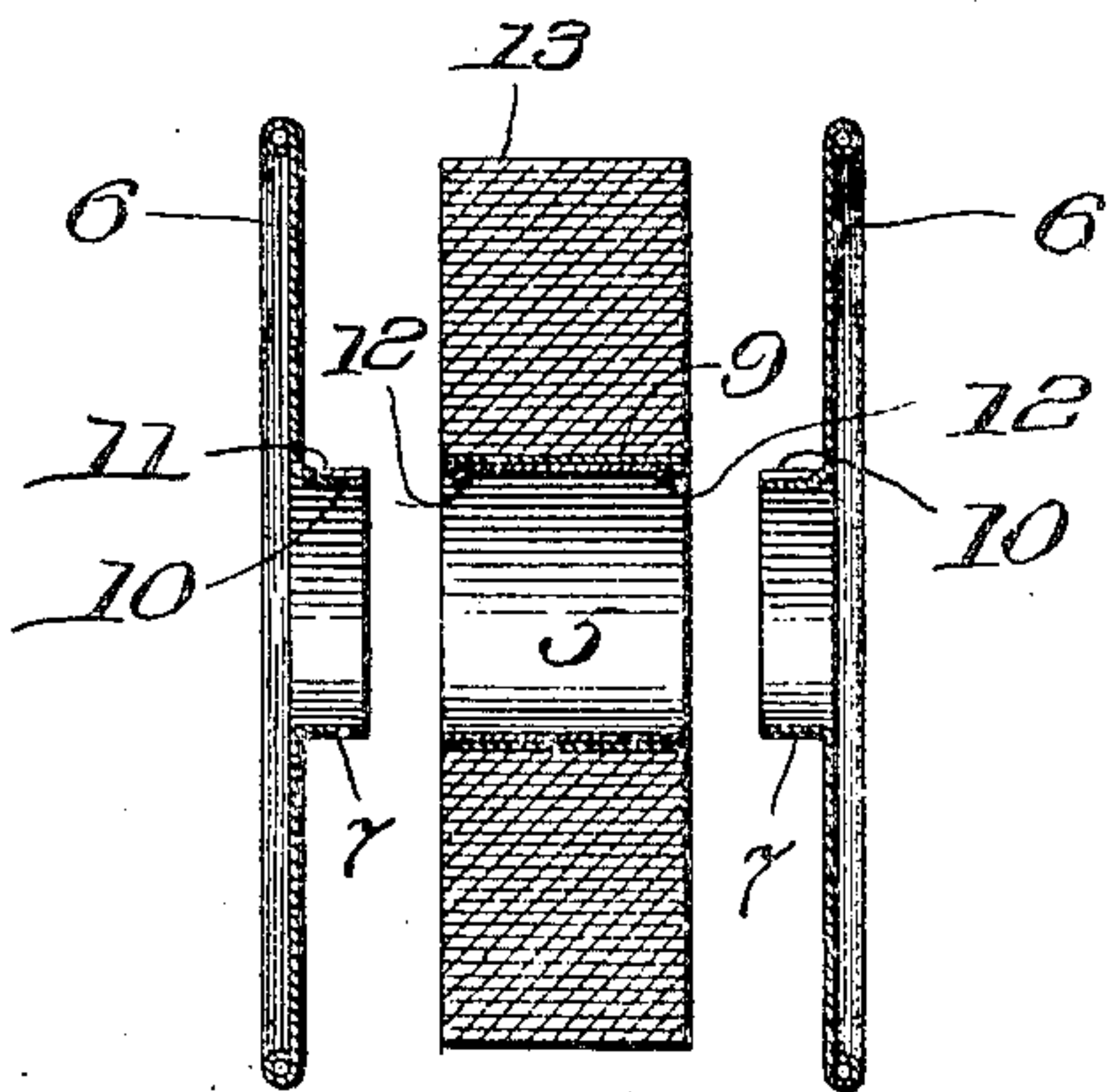


Fig. 3.

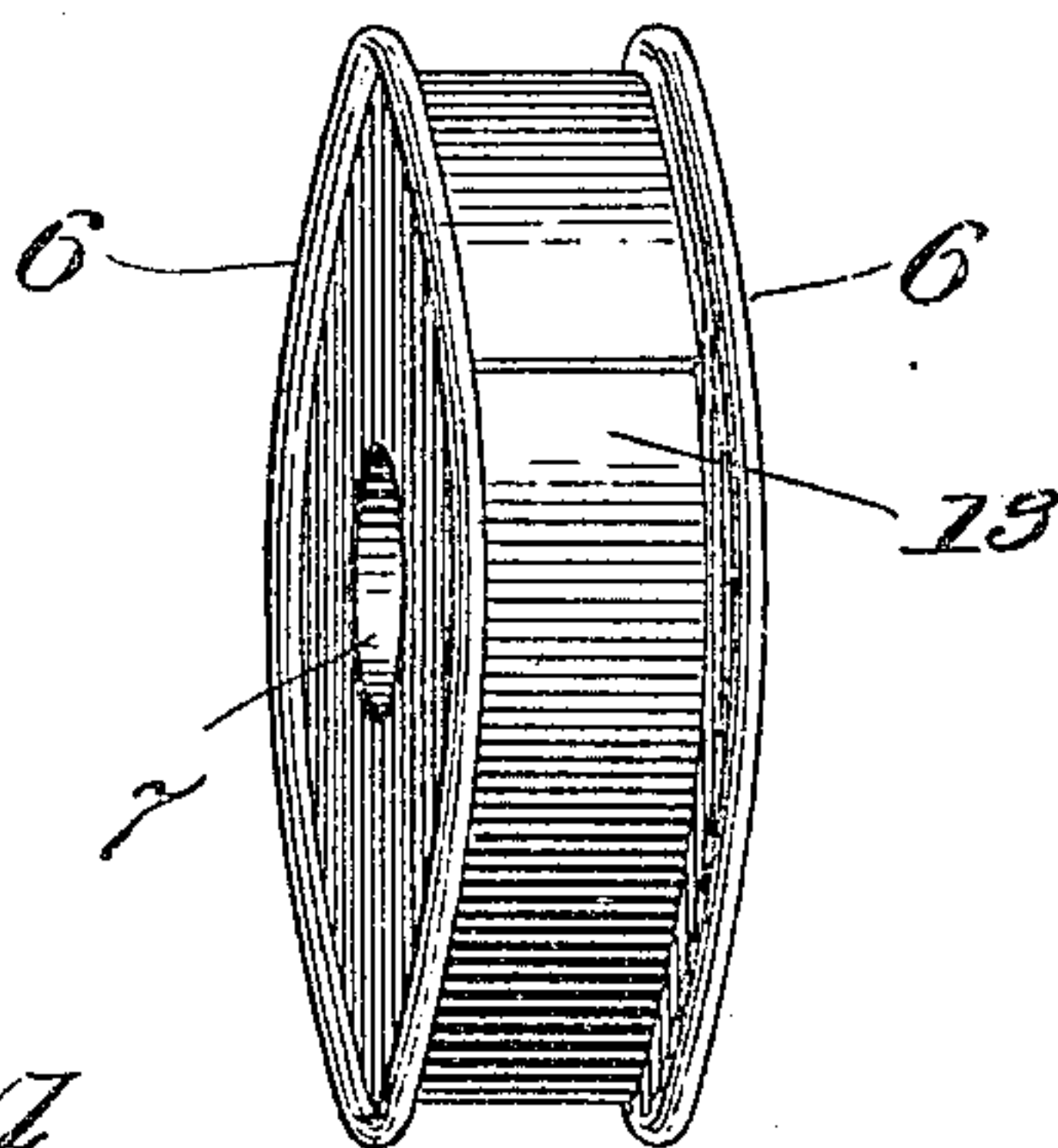
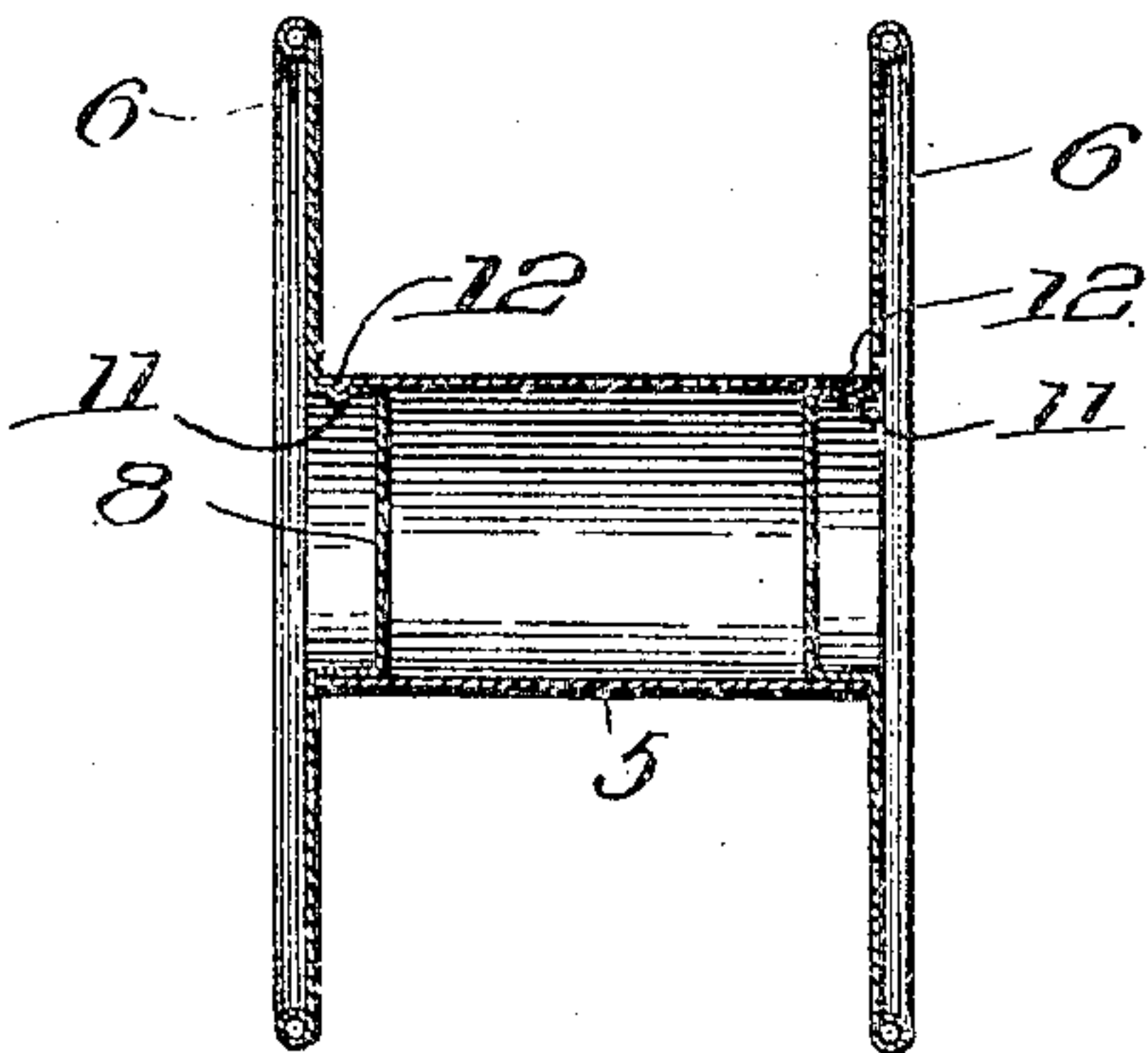


Fig. 4.



Witnesses:
H. S. Gaiter
M. A. Kiddie

Inventor:
Perry S. Bauer
by Wm. V. Bell att'y

UNITED STATES PATENT OFFICE.

PERRY S. BAUER, OF CHICAGO, ILLINOIS, ASSIGNOR TO BAUER & BLACK, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SPOOL ADHESIVE PLASTER.

No. 864,063.

Specification of Letters Patent.

Patented Aug. 20, 1907.

Application filed August 19, 1905. Serial No. 274,935.

To all whom it may concern:

Be it known that I, PERRY S. BAUER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Spool Adhesive Plasters, of which the following is a specification.

The object of this invention is to simplify and improve the manufacture of rubber adhesive surgical bandages by providing a spool of novel construction for carrying the bandage and adapted to be built up after the bandage has been mounted on the part which forms the core of the spool plaster.

The invention is adaptable for various purposes, but it is particularly valuable in relation to adhesive bandages which have heretofore been made as follows:— A wide strip of fabric of considerable length, generally from 300 to 400 yards, is coated with adhesive and wound on a reel with the coated side out and with strips interposed between the layers to hold them apart and out of contact. After the adhesive has dried sufficiently the material is wound from the reel onto drums about three feet in diameter, several drums being required to hold all the material on the reel. The rolls on the drums are then cut transversely into smaller rolls of the widths desired for plasters, the drums being provided with a covering of wood to prevent the knife from engaging the drum itself. Then these small rolls are wound, one at a time, on cylindrical blocks about one foot long, as many being wound on a block as it will hold leaving considerable space between the rolls. From these blocks the rolls are wound, one at a time, onto spools for commercial use. It is necessary to wind the material from the reel to the drums in order that the rolls may be trimmed at the ends and subdivided transversely into rolls of plaster widths, and also to bring the large quantity of material to a form suitable for the subsequent operations. The large roll on the drum may be divided into small rolls of equal width or of different widths. The small rolls are wound from the drum to the blocks in order to facilitate handling and winding on the spools. In winding from the drums to the blocks alternate rolls are wound at a time so that considerable space will be left on the blocks between the rolls. The spools used are completely built up, the ends being soldered or otherwise made fast to the cylindrical parts that form the cores of the finished plaster spools. A great deal of care must be exercised in winding on the spools to keep the layers of the plaster even and make a symmetrical roll. This old mode of manufacture is slow and expensive and involves three separate winding operations in which the material is wound upon itself as it is only on the reel that the separating strips are used. This is objectionable for many

reasons but principally because the adhesive is forced in the winding operations into and through the fabric which is thereby and otherwise rendered less effective for use.

My invention is designed to overcome these objections and to produce a superior plaster by simplifying and improving the mode of manufacture and reducing the number of winding operations.* To accomplish this I proceed as follows:—A paper tube is made fast on a spindle and the material wound thereon from the reel in a plaster length. The roll, with the paper tube inside, is removed from the spindle and subdivided transversely by a cutting tool into plaster rolls of proper width. Then the cylinders of the spools are inserted in the paper tubes to form the core of the complete device, and the ends of the spools are then secured on the ends of the cylinders to complete the spools.

In the accompanying drawings I have illustrated my invention embodied in spools of two kinds and sizes and referring thereto

Figure 1 illustrates the three parts of a spool. Fig. 2 is a sectional elevation of the spool core with plaster thereon, and the ends ready to be affixed to the ends of the core. Fig. 3 is a similar view showing the complete spool plaster. Fig. 4 illustrates a spool of another size and construction.

The spool comprises a core 5 and the ends 6 and the construction is such that the ends can be applied to the core to form a complete spool after the plaster has been placed on the core. The core is preferably a hollow cylinder and each end is provided with a hub to fit tightly in an end of the core to form the spool. In Fig. 2 I have shown the hub formed by an inwardly directed flange 7 and in Fig. 4 the hub 8 is made by pressing up the metal of which the end is formed.

In using my improved spool in making rubber adhesive plasters, the fabric coated with adhesive is wound in proper plaster length on a cylindrical paper core 9 and this roll 13 is then cut transversely into a number of plaster rolls of proper plaster width. The spool cylinders which form the cores of the spools are then inserted in the paper tubes within the plaster rolls and the spool ends are affixed to the ends of the cylinders close to the plasters thereon. The hubs can be made to fit so tightly in the cylinders that they will not become detached in use, and they can be easily forced into place in the ends of the cylinders. I prefer, however, to provide one part, as the hub, with a longitudinal groove 10 connecting with a peripheral groove 11, and to strike up a projection 12 on the other part, in this instance the cylinder core, to enter said grooves. The ends can then be forced on the cylinder core, the projections sliding in the grooves 10, and then turned on the core

to cause the projections to slide in the grooves 11, thereby locking the ends on the core. On the hub of one end the groove 11 extends from one side of the groove 10 and on the hub of the other end the groove 11
5 extends from the other side of the groove 10 so that when the hubs are inserted in the core the ends, one held in each hand, can be turned slightly in opposite directions to simultaneously lock them on the core.

My improved spool enables the making of adhesive
10 plasters with one winding operation instead of the three heretofore employed in each of which the coated fabric is wound upon itself. This saves considerable time, labor and expense and in addition it enables the plasters to be made without the ill effects due to re-
15 peated windings of the coated fabric upon itself which tends to force the adhesive into and through the fabric and otherwise renders the plaster less effective for use. Furthermore, the spools can be produced in this form at less expense than in the usual built up form, and
20 they can be stored in much less space when the parts are detached.

What I claim and desire to secure by Letters Patent is:

As a new article of manufacture, a spool adhesive plaster comprising a tube, a plaster roll on said tube and 25 a spool comprising a cylindrical core open at its ends and adapted to receive said tube with the plaster roll thereon, projections within said core adjacent to its ends, detachable spool ends, each of said ends having a hub formed integral therewith by pressing up the metal 30 of which the end is made, each hub having a peripheral groove removed from its end, and a longitudinal groove connecting with the peripheral groove at one end thereof to receive the projections within the core, the peripheral groove on one hub extending from one side of the longitudinal groove and the peripheral groove on the other 35 hub extending from the other side of its longitudinal groove whereby the spool ends may be simultaneously locked to the core by turning the ends in opposite directions after the hubs have been inserted in the ends of the 40 core.

PERRY S. BAUER.

Witnesses:

M. R. KIDDIE,
WM. O. BELT.