No. 825,291. PATENTED JULY 10, 1906.

P. S. BAUER.

ADHESIVE PLASTER AND METHOD OF MAKING SAME.

APPLICATION FILED AUG. 21, 1905.

Fig. 4.

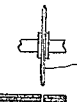



Fig. 3.




Fig. 2.

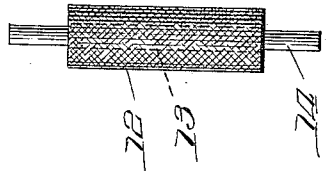



Fig. 6.

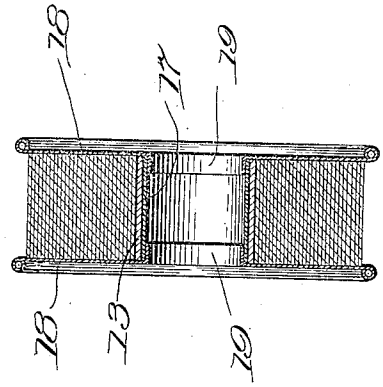



Fig. 7.

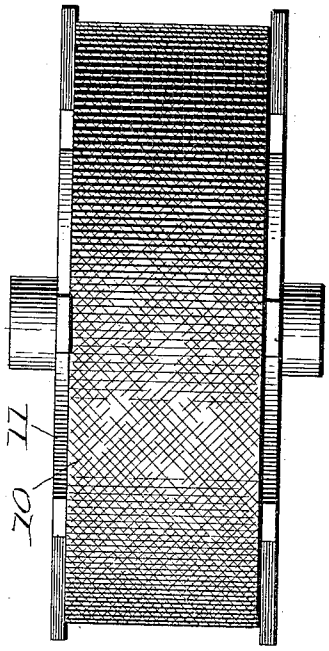
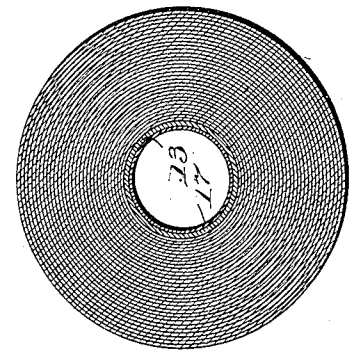



Fig. 5.




Witnesses:
H. S. Gaither
M. A. Riddle

Inventor:
Perry S. Bauer
by Wm. H. Belt
atty.

THE NORRIS PETERS CO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

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

## ADHESIVE PLASTER AND METHOD OF MAKING SAME.

No. 825,291. Specification of Letters Patent. Patented July 10, 1906.

Application filed August 21, 1905. Serial No. 275,094.

*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 Adhesive Plasters and Mode of Making Same, of which the following is a specification.

This invention relates particularly to rubber adhesive surgical plasters which are usually wound on spools in varying widths and lengths for commercial use.

Heretofore these plasters have been generally made as follows: A wide strip of fabric, generally from three hundred to four hundred yards in length, is coated with adhesive and wound on a reel with the coated side out and with separating-strips interposed between the windings to prevent contact. After the adhesive has dried sufficiently the material is wound from the reel onto drums about three feet in diameter and slightly longer than the width of the material, several drums being required to hold the material on the reel. The rolls on the drums are then cut transversely into small rolls of the widths desired for plasters, the drums being provided with a covering of wood or other suitable material to prevent the cutting-tool from engaging the drum itself. It is necessary to thus wind the material from the rolls 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 widths or of different widths. The small rolls are wound one at a time from the drums onto cylindrical blocks about a foot long, and from these blocks the rolls are wound one at a time onto spools for commercial use. The small rolls are wound from the drum to the blocks in order to facilitate handling and winding on the spools. Alternate rolls on the drums are wound onto the blocks at first, 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 core of the finished plaster-spools. Great care must be exercised in winding on the spools to keep the layers of the plasters even and make a symmetrical roll. This old mode of manufacture, which I believe is the general practice employed by manufacturers of these plasters, is slow and expensive and involves three separate winding operations in which the material is wound upon itself—first on the drums, then on the blocks, and finally on the spools. The separating-strips are used only when the material is wound on the reel. The repeated winding of the material upon itself is objectionable not only because of the time, labor, and expense involved, but partly because the adhesive is forced in and through the fabric during the winding operations, and the plaster 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, briefly, as follows: A paper tube is made fast on a revoluble spindle and the material wound thereon from the reel in a plaster length, the material being measured as it passes from the reel. The roll with the paper tube inside is then removed from the spindle and subdivided transversely by a knife or saw into plaster-rolls of proper width. Then the cylinder of a spool is inserted in the paper tube of each plaster-roll to form a core of the complete device, and the ends of the spool are then secured on the ends of the cylinder to complete the spool.

In the accompanying drawings I have illustrated several steps in the manufacture of a rubber adhesive spool-plaster in accordance with my invention, and referring thereto—

Figure 1 shows the plaster wound on the reel. Fig. 2 shows the material wound on the spindle. Fig. 3 shows the roll removed from the spindle and one plaster-roll cut off. Fig. 4 shows the spool-cylinder. Fig. 5 is a larger view showing the paper tube and the spool-cylinder in section and in place within the plaster-roll. Fig. 6 is a transverse sectional view through a complete spool-plaster.

The coated fabric 10 is wound upon a reel 11 in the usual manner, and from this reel the material is wound in a roll 12 on a paper tube 13, mounted on a spindle 14. The roll 12 is then removed from the spindle with the pa-

per tube inside thereof and subdivided by a cutting-tool, such as a saw 15, into plaster-rolls 16 of required width.

The spool comprises a hollow cylindrical core 17 and the ends 18, these parts being made separate from each other and constructed to be fastened together after the plaster-roll has been placed on the cylindrical core. For this purpose each spool end is provided with a hub 19, constructed to fit tightly in an end of the core, and they may be made to fit so tightly in the core that there will be no danger of their becoming detached in use.

The roll 12 having been divided into plaster-rolls of proper width, a spool-core 17 is inserted within the paper-tube 13 in each roll, as shown in Fig. 5, and then the spool ends are affixed to the ends of the spool-core to form a complete spool-plaster, as shown in Fig. 6.

By my improved mode of manufacturing adhesive plasters the adhesive-coated material is wound upon itself once only, and this winding corresponds to the final winding on the spool, according to the mode of manufacture heretofore practiced. I thus eliminate from the mode of manufacture two windings of the coated material upon itself, and thereby avoid the ill effects due to repeated windings of the material upon itself, which, as before mentioned, tends to force the adhesive into and through the fabric and otherwise renders the plaster less effective for use. My improved mode of manufacture also materially reduces the cost of manufacture, in addition to producing an improved plaster, by eliminating certain essential steps in the mode of manufacture as heretofore practiced.

While my invention is especially useful in connection with the manufacture of rubber adhesive surgical plasters, it can be obviously employed with results of an equally-satisfactory character in connection with the manufacture of other plasters or like articles in which a fabric or other foundation material is coated with adhesive.

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

1. As a new article of manufacture a spool adhesive plaster comprising a tube, a plaster-roll on said tube, a spool-core in said tube, and detachable spool ends affixed to the ends of said core.

2. The mode herein described of making spool adhesive plasters which consists in winding the coated fabric into a roll upon a paper tube and then subdividing the roll and tube into plaster-rolls of proper widths, then inserting the core of a spool in the tube within the plaster-roll, and then affixing the detached ends of the spool to the ends of the core.

PERRY S. BAUER.

Witnesses:
M. A. KIDDIE,
WM. O. BELT.