No. 872,345. PATENTED DEC. 3, 1907.

O. HAMMER.

PATTERN ROLL FOR PAPER MACHINES.

APPLICATION FILED APR. 26, 1907.

Fig. 1

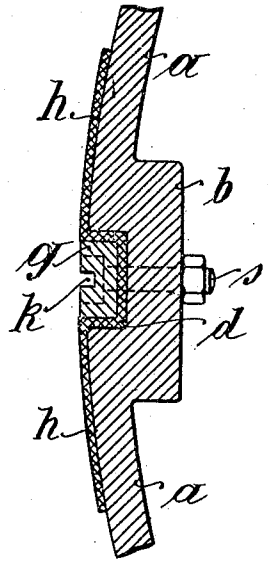


Fig. 2

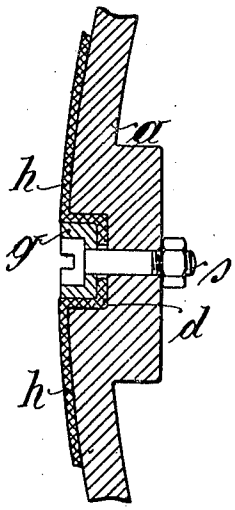


Fig. 3

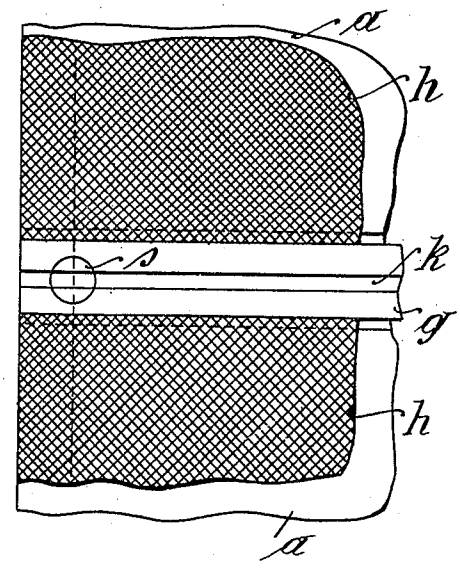
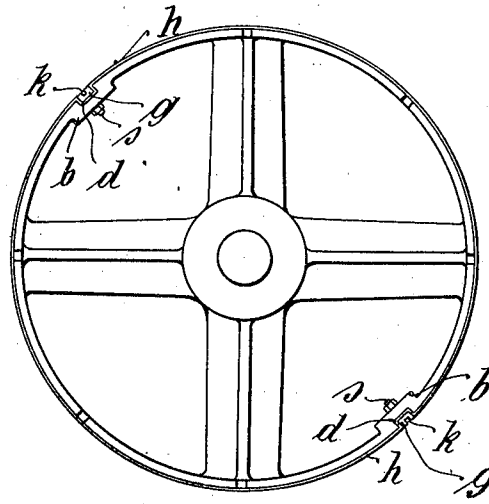


Fig. 4



Witnesses
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PATTERN-ROLL FOR PAPER-MACHINES.

No. 872,345. Specification of Letters Patent. Patented Dec. 3, 1907.

Application filed April 26, 1907. Serial No. 370,496.

To all whom it may concern:

Be it known that I, OSKAR HAMMER, a subject of the King of Saxony, residing at Mahlitzsch, Post Niederstriegis, in Saxony, Germany, have invented a certain new and useful Pattern-Roll for Paper-Machines, of which the folowing is a specification.

In the known pattern rolls used in card-board or paper machines and having on their surfaces die-covers of material permeable to air (usually wire gauze), to enable a pattern to be impressed on the card-board simultaneously with the pressing of the latter, the covers are fastened to the rolls by soldering their edges in longitudinal grooves formed in the rolls. This renders the changing of the covers difficult and also has the still more important disadvantage that the pattern is defaced at the soldered joints, so that on portions of the card-board the pattern is not distinctly impressed, and these portions must be removed when the card-board is used for the manufacture of articles such as beer-glass trays and the like.

According to the present invention the cover is fastened to the roll by means of clamping bars adapted to be fixed into longitudinal grooves by means of screws, so that the pattern can be easily changed and that an impression of uniform distinctness is produced by all parts of the cover. In most cases a single roll presses two pieces of card-board, so that two covers must be used. These can be fastened to the roll by placing one edge of each cover over a longitudinal groove and pressing the said edges into the groove by means of a clamping bar placed upon them, the opposite edge of the covers being thereupon pressed into another groove in the same manner. The die-covers are cut or perforated to give passage to the screws.

A construction embodying the invention is illustrated in the annexed drawing, in which

Figures 1 and 2 are sections of the fastening device, in different planes; Fig. 3 is a partial plan-view and Fig. 4 a cross-section of the pattern roll.

The pattern roll *a* is provided with two thickened parts *b* diametrically opposite each other. In each part *b* there is a longitudinal groove *d* into which a clamping bar *g* fits loosely, so that when portions of the covers *h* are pressed into the groove by the bar the groove is filled. The bars *g* are provided with longitudinal grooves *k* which indicate where the cardboard is to be cut. The slots in the heads of the fastening screws or bolts *s* correspond with the grooves *k* so that the latter are not interrupted by the said heads. If the grooves *d* and bars *g* are made wedge-shaped the covers *h* need not pass underneath the bars, but will be held by friction at the sides of the grooves *d*.

What I claim as my invention and desire to secure by Letters Patent of the United States is:—

A pattern roll for cardboard or paper machines having in its surface a longitudinal groove in combination with a pattern adapted to engage said groove, a bar for holding the pattern in said groove, and screws for attachment of said bar to the roller, the bar having a longitudinal slot and the screw heads having their slots alined with that of the bar.

In witness whereof I have signed this specification in the presence of two witnesses.

OSKAR HAMMER.

Witnesses:
HERM. TASK,
RUDOLPH FRICKE