

No. 827,394.

PATENTED JULY 31, 1906.

G. RENKER.
CLAMP FOR FASTENING STONE COUCH ROLLS AND WET PRESS ROLLS
ON THEIR AXLES.

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Fig. 1.

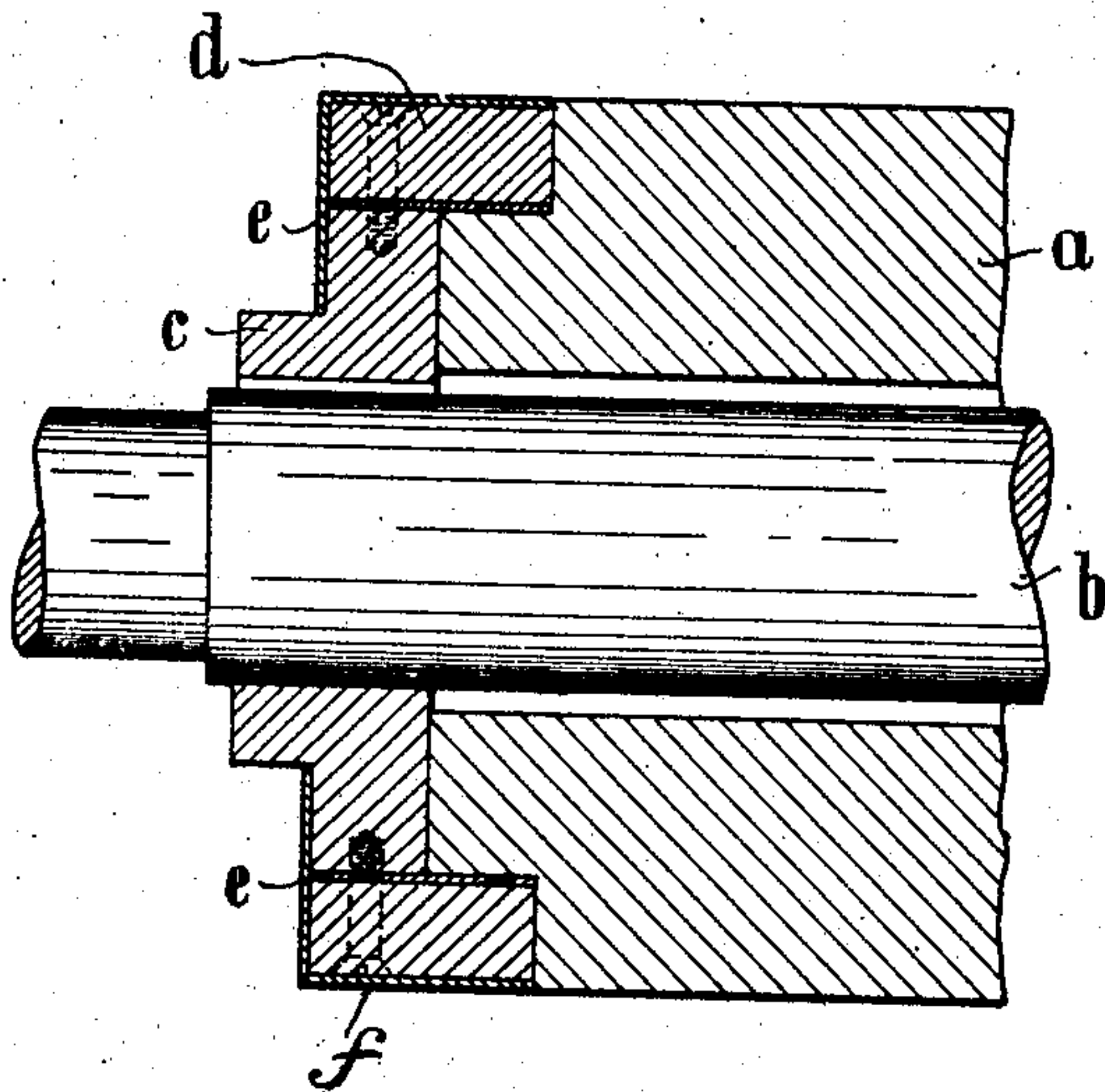
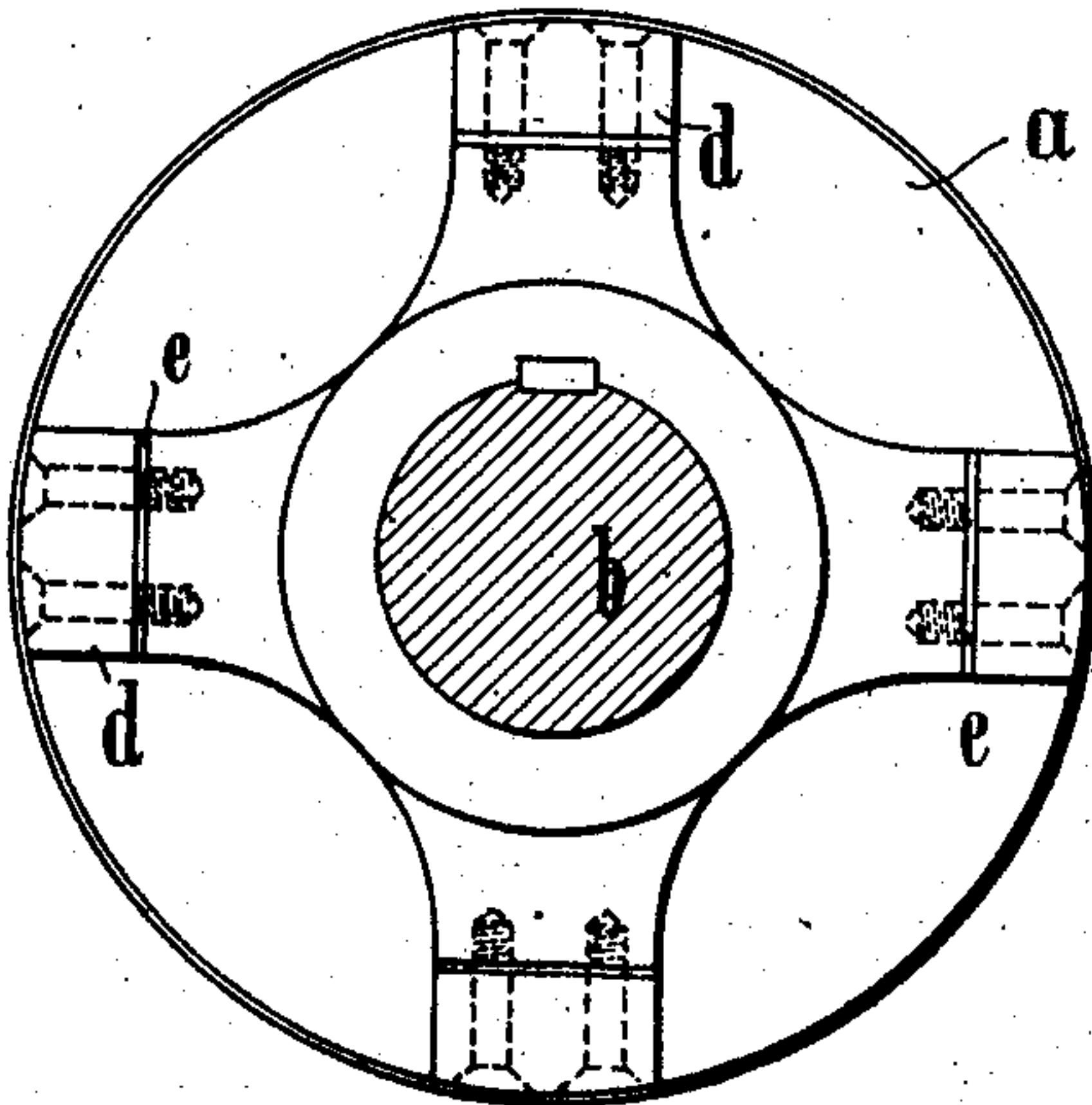


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

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CLAMP FOR FASTENING STONE COUCH-ROLLS AND WET-PRESS ROLLS ON THEIR AXLES.

No. 827,394.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed November 28, 1905. Serial No. 289,386.

To all whom it may concern:

Be it known that I, GUSTAV RENKER, a subject of the King of Prussia, German Emperor, residing at Düren, Rheinland, in the German Empire, have invented certain new and useful Improvements in Clamps for Fastening Stone Couch-Rolls and Wet-Press Rolls for Paper-Machines on Their Axles, of which the following is a full, clear, and exact specification.

My invention relates to and has for its object a clamp for fastening stone couch-rolls and wet-press rolls onto their axles by means of a carrier and removable claws.

Stone or earthenware couch-rolls and wet-press rolls for paper-machines have previously been fastened on their axles by means of metal ends having the same diameter as the rolls. These metal ends were joined to the front ends of the stone-cylinders by means of a ring which, having been heated, was contracted or shrunk onto the cylinder, and the metal ends were firmly fixed to the axle. One of the great objections to this method of fastening is the disadvantage that the stone is heated, so that a breaking off of parts of the stone end at the surface of the inner edge of the ring easily takes place, or otherwise cracks may be caused. Another objection to such a method of fastening is that the cylinder cannot be dismantled without injury to the stone.

One of the important objects of my invention is, therefore, a clamp to hold the rolls in such a way that they are securely mounted on their axles without being broken or cracked.

Another object is that the rolls may be so held that they may be easily dismantled without injury to the stone.

The accompanying drawings illustrate a clamp for fastening the rolls embodying my invention.

Figure 1 is a vertical section through the clamp. Fig. 2 is an elevation.

Similar letters of reference refer to similar parts in both views.

Two crosses *c*, of cast-iron, cast-steel, or the like, which are of the same pattern, are keyed onto the shaft *b*, Figs. 1 and 2, and inclose or lock the stone *a* between them. A claw *d* is fastened onto each of the four arms of the cross *c*, which fit into corresponding notches or grooves in the stone *a*. The stone is securely held between the four claws, and the cylinder can easily be dismantled when required. The security of the fastening may be further increased by employing a layer *e*, of lead, copper, and the like under the claws *d*. The carrier *c* for the claws *d* may be also formed as a disk with cuts in it for the reception of the claws *d* instead of as a cross. A cap *f*, of brass or the like, may be placed on the cylinder end after the claws have been fixed in the carrier by screws or otherwise.

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

1. A clamp for fastening stone couch-rolls and wet-press rolls of paper-machines to their axles, in which the stone is held fast by means of claws which fit into notches or grooves in the same, which claws are held in the carrier which is keyed to the shaft.

2. In a clamp for fastening stone couch-rolls and wet-press rolls of paper-machines to their axles, claws which fit into notches or grooves in the stone, and which are attached to the carrier.

In witness whereof I have signed hereunto my name in the presence of two subscribing witnesses.

GUSTAV RENKER.

Witnesses:

HENRY QUADJLIEG,
JOSEF POULK.