No. 678,227. Patented July 9, 1901.

E. CONLEY, Dec'd.

J. CONLEY, Administrator.

BED ROLL.

(Application filed Nov. 2, 1900.)

(No Model.)

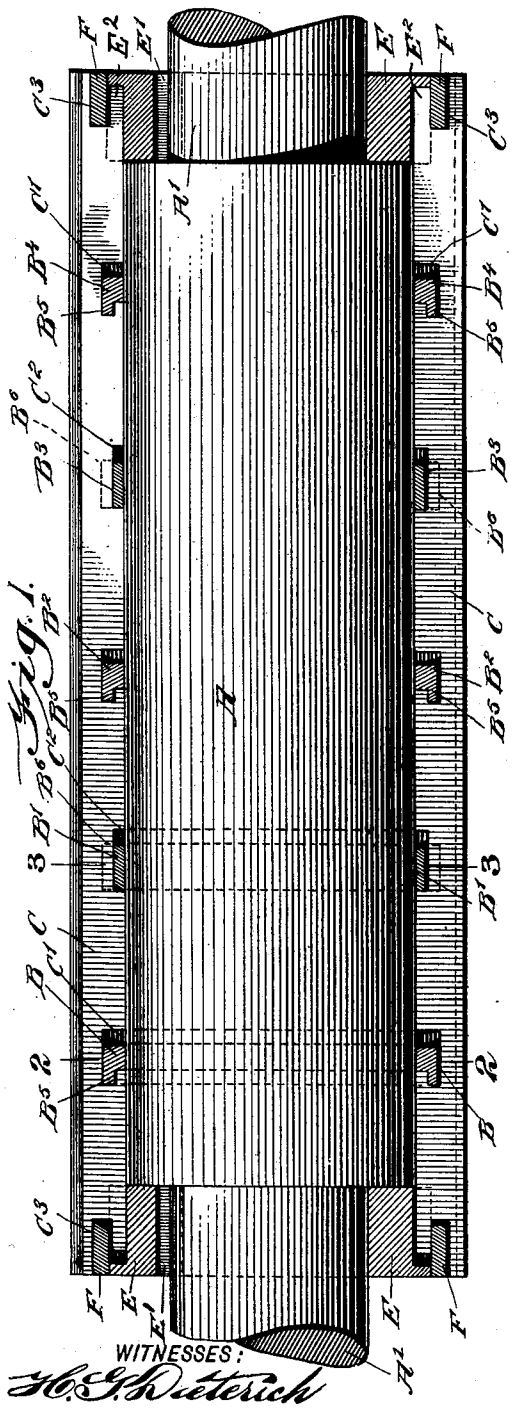


Fig. 1.

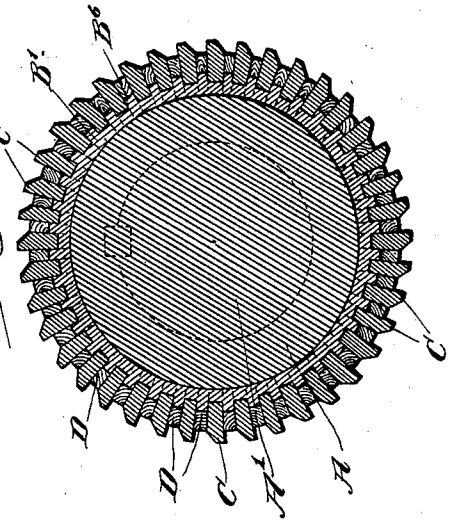


Fig. 3.

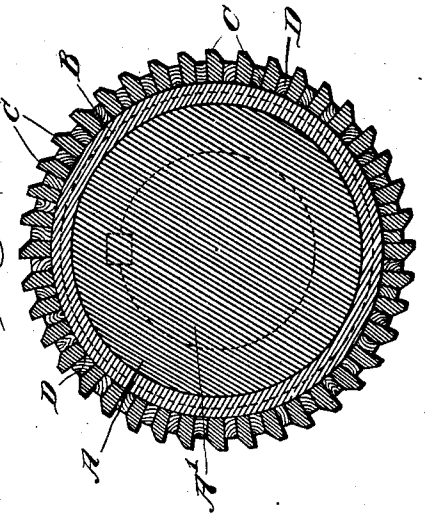


Fig. 2.

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EDWARD CONLEY, OF NEW YORK, N. Y.; JAMES CONLEY ADMINISTRATOR OF SAID EDWARD CONLEY, DECEASED.

BED-ROLL.

SPECIFICATION forming part of Letters Patent No. 678,227, dated July 9, 1901.

Application filed November 2, 1900. Serial No. 35,242. (No model.)

To all whom it may concern:

Be it known that I, EDWARD CONLEY, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Bed-Roll, of which the following is a full, clear, and exact description.

The invention relates to beating-engines used in the manufacture of paper and analogous products; and its object is to provide a new and improved bed-roll arranged to securely hold the knives in position throughout their length on the central solid plug to prevent the knives from springing up at the middle even should the plug warp or swell.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a longitudinal sectional elevation of the improvement. Fig. 2 is a transverse section of the same on the line 2 2 in Fig. 1, and Fig. 3 is a similar view of the same on the line 3 3 in Fig. 1.

The plug or spindle A, of metal, wood, or other suitable material, is provided with the reduced ends A′, and on this plug or spindle are shrunk or otherwise secured a number of metallic rings B B′ B^2 B^3 B^4, of which the rings B, B^2, and B^4 are formed with longitudinally-extending hooks B^5, while the rings B′ B^3 are formed on their peripheral surface with longitudinally-extending grooves B^6 in alinement with the hooks B^5 of the rings B, B^2, and B^4. As shown in Fig. 1, the differently-constructed rings alternate and are spaced apart a desirable distance, and as many such alternating rings may be employed as deemed necessary, the number depending on the length of the bed-roll.

The hooks B^5 are adapted to engage bayonet-slots C′, formed on the inner portions of the knives or bars C, resting with their inner edges on the peripheral surface of the plug or spindle A throughout the length of the latter, said knives or bars also having cut-out portions C^2, the upper walls thereof engaging the longitudinal grooves B^6, formed in the rings B′ B^3. The slots C′ and the cut-out portions C^2 are sufficiently large to permit of moving the knives or bars longitudinally on the plug or spindle A, so as to engage the hooks B^5 with the bayonet-slots C′, as shown in Fig. 1. The knives or bars C extend radially, and between adjacent knives are held the usual filling-strips D of wood or other suitable material.

On the reduced ends A′, adjacent to the ends of the plug or spindle A, are arranged metallic heads E, secured in place on the spindle by suitable keys E′, and said heads E are formed on their peripheral surface with grooves E^2 for engagement by the ends of the knives C, the grooves and knives terminating a distance from the outer faces of the heads E. Rings F encircle the outer portions of the heads E and engage corresponding slots C^3 in the ends of the knives or bars C to securely hold the knives against longitudinal movement. By resting the knives C on a solid plug or spindle a very firm bearing is obtained, and by holding the bars in position on the rings and the heads E, as described, it is evident that the bars are not only held down on the plug or spindle A by the hooks B^5, but are also prevented from moving transversely, especially on account of the knives fitting into the longitudinal grooves in the rings B′ B^3 and the heads E.

By the arrangement described the knives are not liable to spring at the middle even should the wooden plug or spindle A swell, as the hooks B^5 will not allow an outward movement of the knives C. Thus provision is made for any possible unevenness in the plug or spindle, and consequently the knives are held in proper position at all times to insure a proper beating of the stock when the roll is used in the beating-engine.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A bed-roll, comprising a central plug, a plurality of spaced rings secured on the plug, sundry of the rings having longitudinally-extending hooks and the remaining rings hav-

ing longitudinal grooves in alinement with the hooks, knives set in said grooves and having bayonet-slots for engagement with said hooks, and a head on said plug and having longitudinal grooves for receiving the ends of said knives, as set forth.

2. A bed-roll, comprising a central plug, a plurality of spaced rings secured on the plug, sundry of the rings having longitudinally-extending hooks and the remaining rings having longitudinal grooves in alinement with the hooks, knives set in said grooves and having bayonet-slots for engagement with said hooks, a head on said plug and having longitudinal grooves for receiving the ends of said knives, and rings on said heads and engaging slots in the ends of the knives, as set forth.

3. A bed-roll, comprising a central plug, provided with reduced ends, a plurality of spaced rings secured on the plug, sundry of the rings having longitudinally-extending hooks and the remaining rings having longitudinal grooves in alinement with the hooks, knives set in said grooves and having bayonet-slots for engagement with said hooks, the said knives resting with their inner edges on the peripheral surface of the plug, filling-strips between adjacent knives, and heads secured on the reduced ends of the plug and having longitudinal grooves for receiving the ends of the knives, as set forth.

4. A bed-roll, comprising a central plug, a plurality of spaced rings secured on the plug, sundry of the rings having longitudinally-extending hooks and the remaining rings having longitudinal grooves in alinement with the hooks, knives having bayonet-slots for engagement with said hooks, said knives also having cut-out portions, the upper walls of which engage the said longitudinal grooves, heads on said plug and formed on their peripheral surface with grooves for receiving the ends of said knives, and rings encircling the outer portion of the heads and engaging corresponding slots in the ends of the knives, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD CONLEY.

Witnesses:
AARON H. SCHWARZ,
KATE C. HUMMEL.