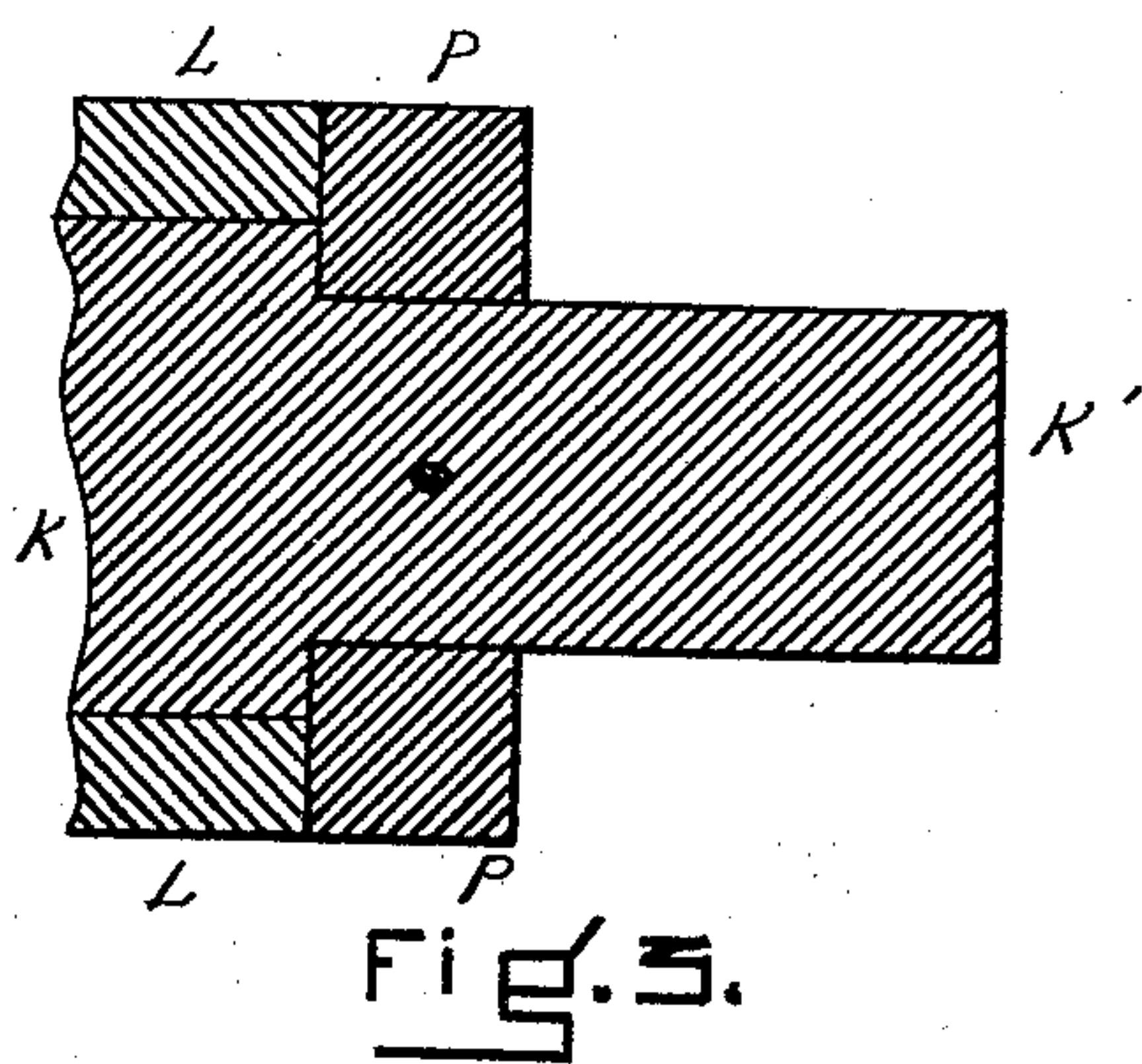
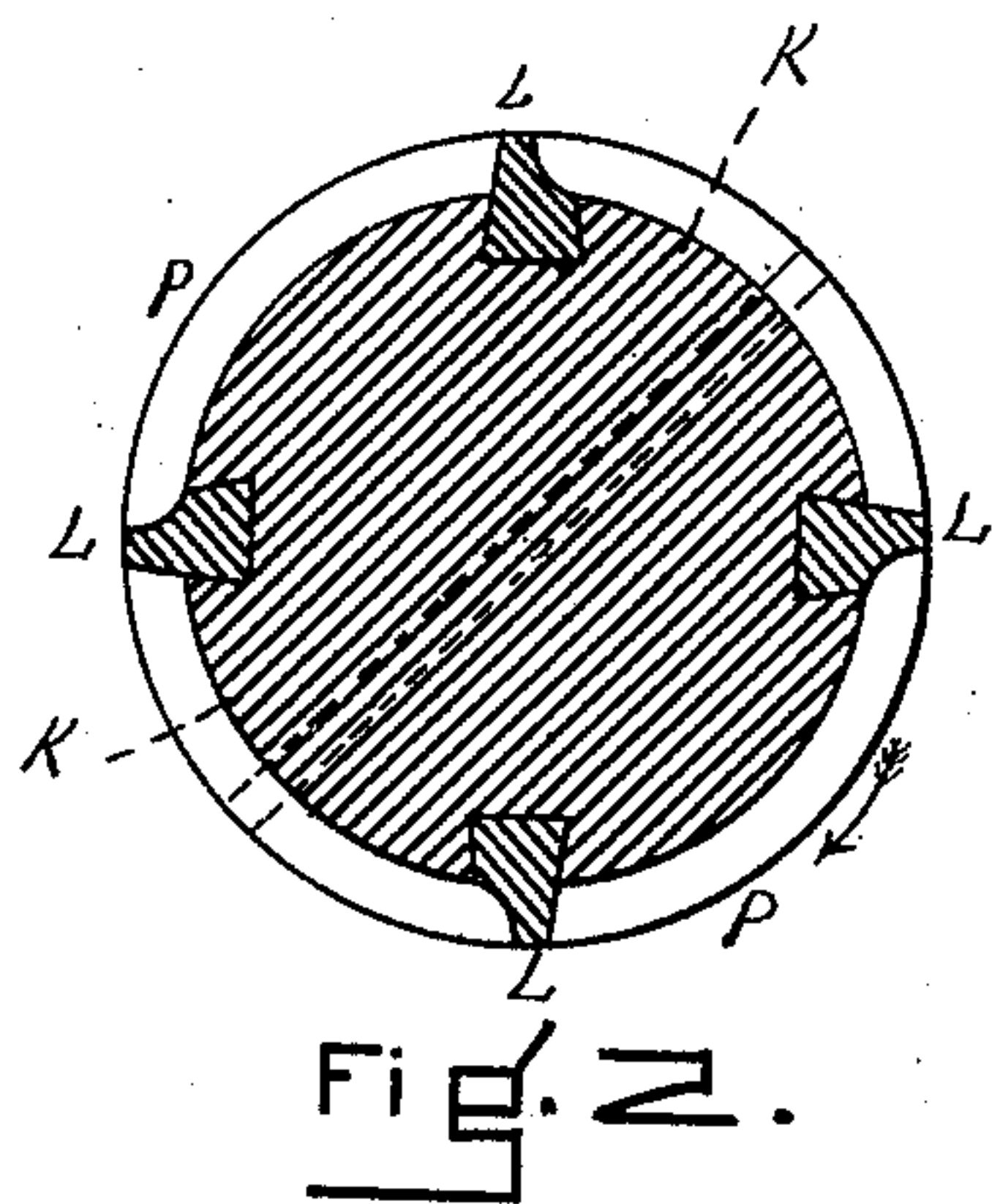
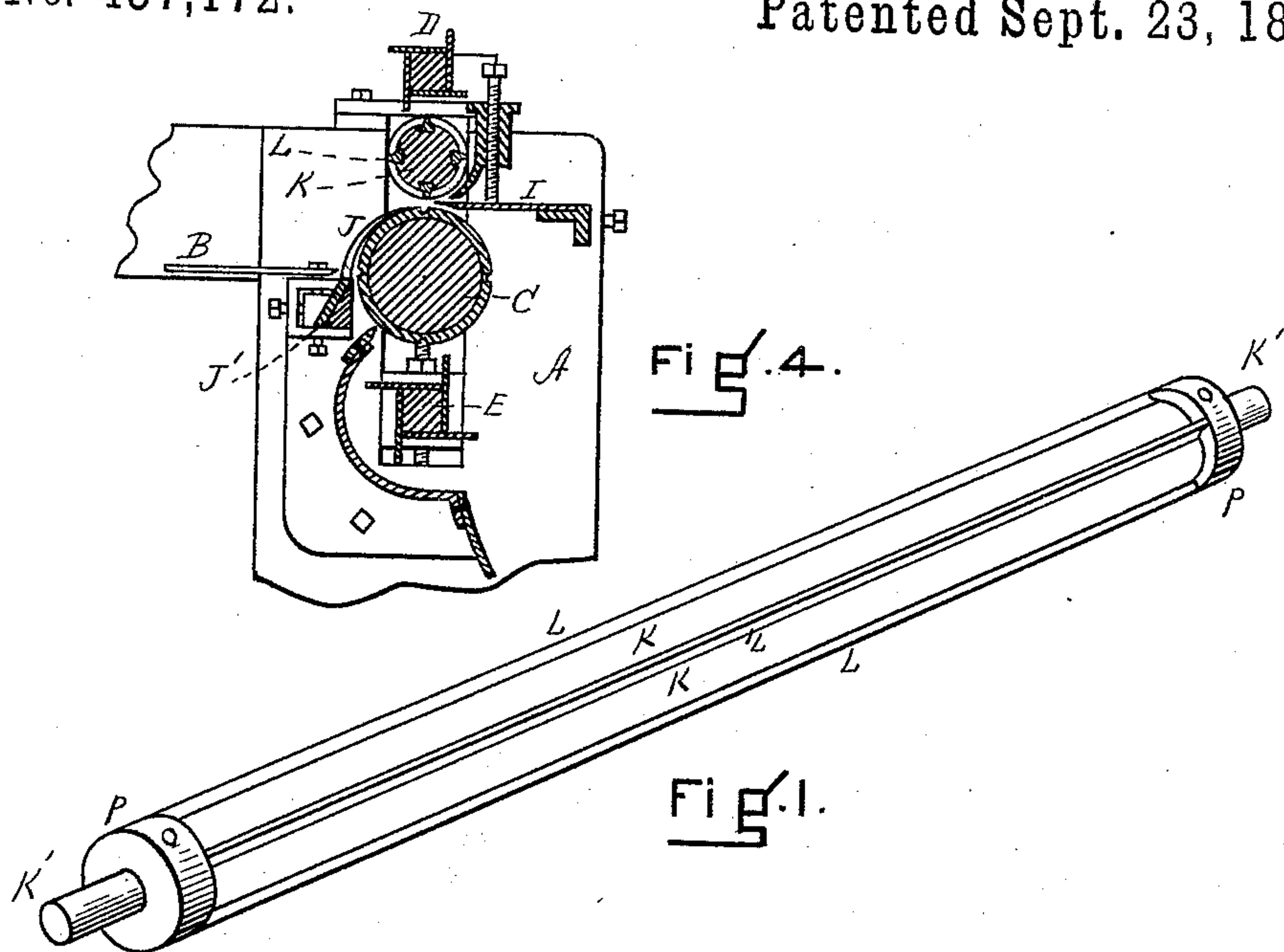


(No Model.)

F. H. CHASE.  
ROLLER COTTON GIN.

No. 437,172.

Patented Sept. 23, 1890.



WITNESSES.  
*W. M. Williams*  
*J. M. Hartnett*

INVENTOR.  
*Frank H. Chase*  
By his Atty  
*Sherry Williams*

# UNITED STATES PATENT OFFICE.

FRANK H. CHASE, OF HAVERHILL, MASSACHUSETTS, ASSIGNOR, BY DIRECT  
AND MESNE ASSIGNMENTS, TO THE CHASE COTTON GIN COMPANY, OF  
NEW HAMPSHIRE.

## ROLLER COTTON-GIN.

SPECIFICATION forming part of Letters Patent No. 437,172, dated September 23, 1890.

Application filed April 26, 1890. Serial No. 349,654. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK H. CHASE, of Haverhill, in the county of Essex and State of Massachusetts, have invented a new and  
5 useful Improvement in Roller Cotton-Gins, of which the following is a specification.

My invention relates to that class of cotton-gins known as "roller-gins," in which a revolving beater, sometimes called a "clearer"  
10 or "stripper," is used; and it consists in the combination, with the other essential parts of the gin, of the beater constructed as below described, and illustrated in the accompanying drawings, in which—

15 Figure 1 is a view in perspective of my improved beater. Fig. 2 is a cross-section of the same. Fig. 3 is a longitudinal section of one end of the same. Fig. 4 is a central vertical section of a portion of a cotton-gin with my  
20 beater in position.

Similar letters of reference indicate like parts.

A represents the frame; B, the table; C, the drawing-roller; D, the upper doffer; E, the  
25 lower doffer, and I the pressure-bar, all constructed substantially as usual.

J J' are respectively fingers and a finger-bar constructed as described in Letters Patent numbered 418,908, dated January 7, 1890.

30 K is the roll constituting the body of the beater, provided at its opposite ends with the integral shafts K', by means of which it is rotated.

L L are four (more or less) parallel straight

radial wings, made, preferably, of hardened 35  
steel, of substantially the dovetailed shape shown, secured in the body of the beater by being slid into corresponding longitudinal dovetailed grooves. The wings are prevented  
40 from longitudinal movement by the collars P, which are pinned to the shaft of the beater, as shown, next the opposite ends of said wings. As will readily be seen, these wings  
45 are removable and interchangeable, so that when one wears out or breaks it can be quickly replaced by another. It has also the advantage over a spiral or corrugated beater, in that  
50 the feed is uniform for the length of the roller, while a spiral beater has a tendency to convey the seed-cotton to one end of the roller. Moreover, the direct motion had by the straight  
beater-wings tends to prevent kinking, curling, or twisting of the fiber.

Having thus fully described my invention, what I claim, and desire to secure by Letters 55  
Patent, is—

In a roller cotton-gin, the combination, with the drawing-roller, of the winged beater or stripper described, consisting, essentially, of the main portion or roll K and the straight 60  
longitudinal wings L, held removably in longitudinal grooves in the roll and prevented from longitudinal movement by the collars P, substantially as described.

FRANK H. CHASE.

Witnesses:

HENRY W. WILLIAMS,  
J. M. HARTNETT.