

(No Model.)

N. D. LEWIS.
CLOTHES POUNDER.

No. 524,422.

Patented Aug. 14, 1894.

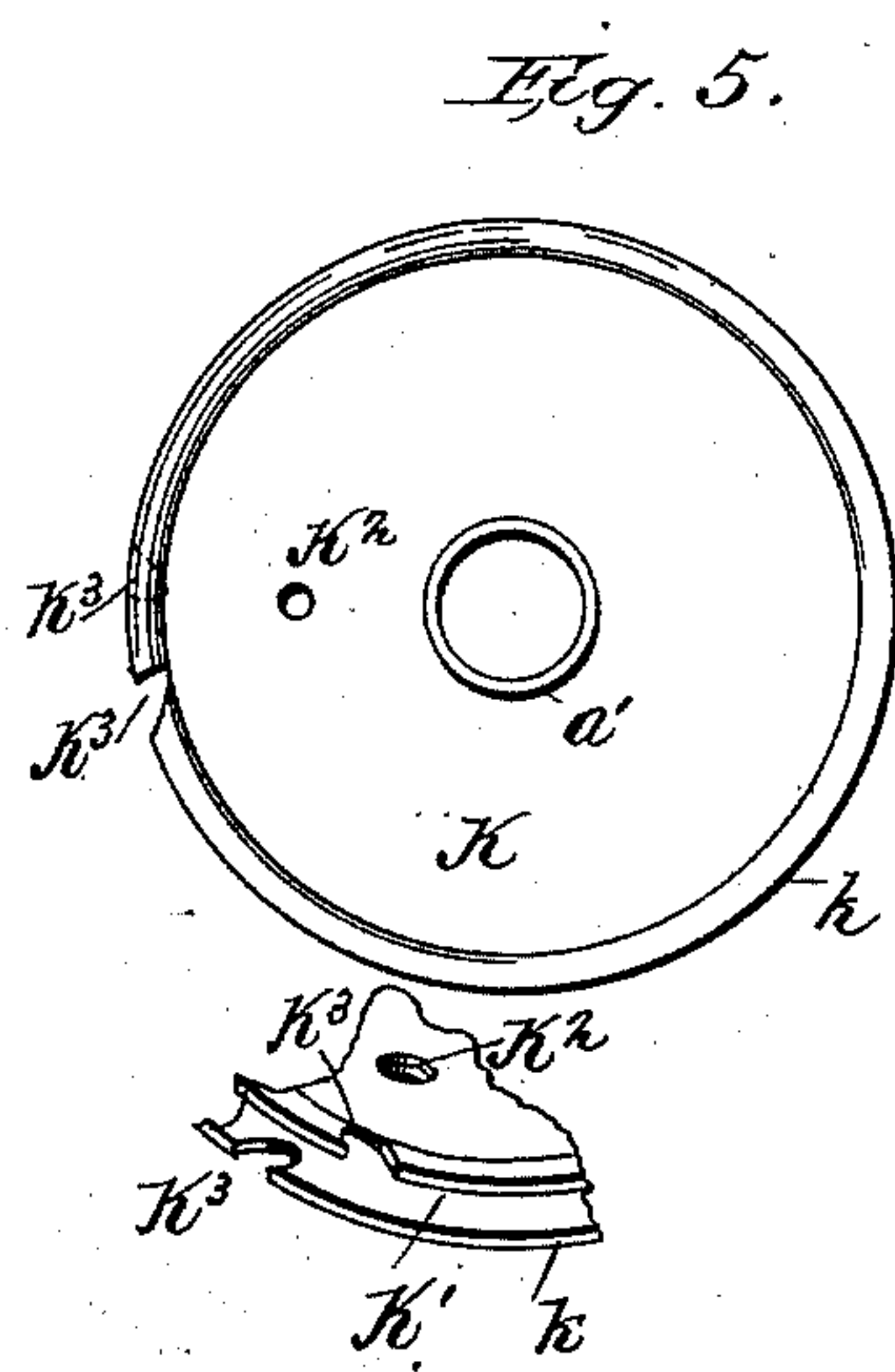
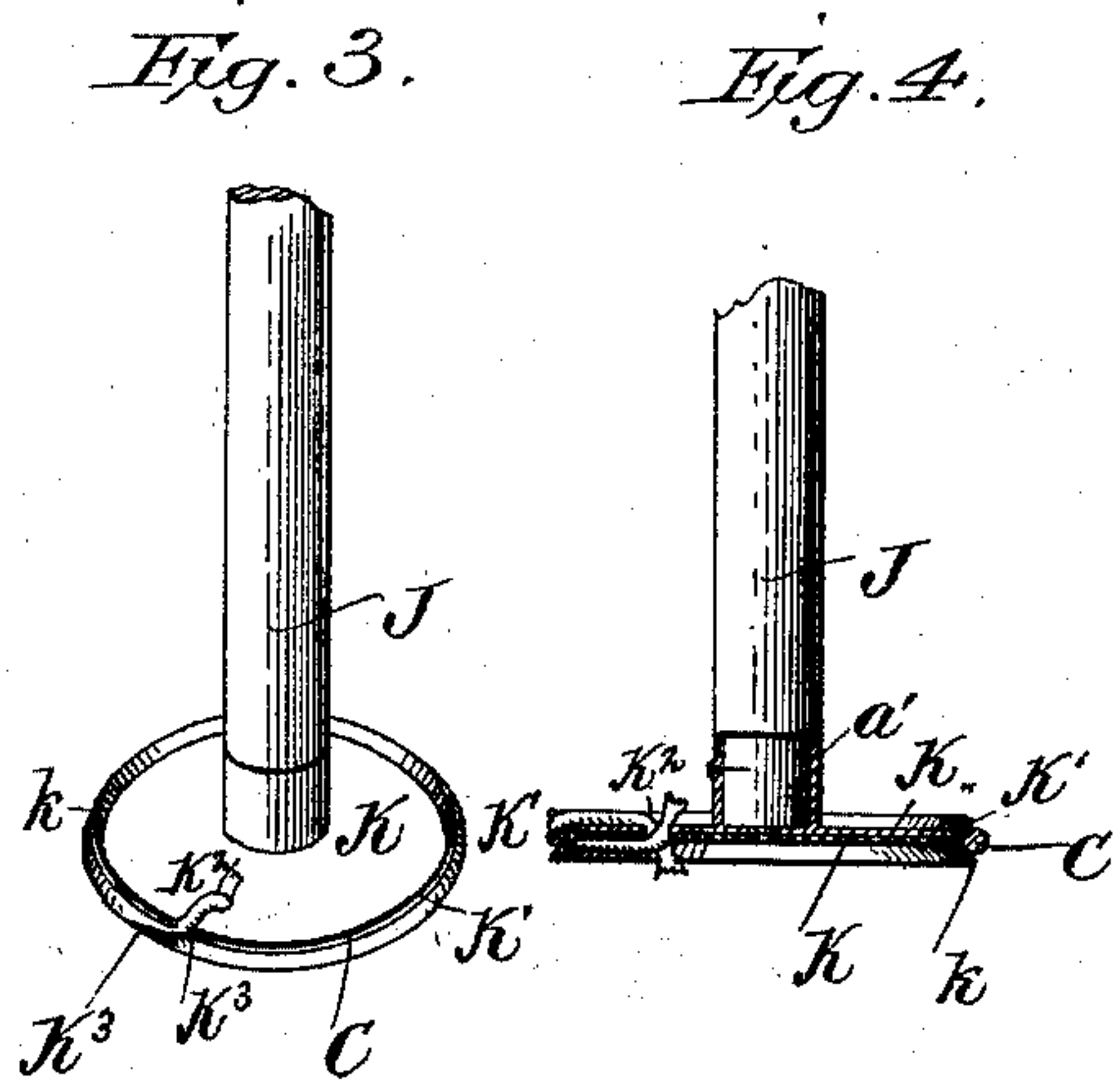
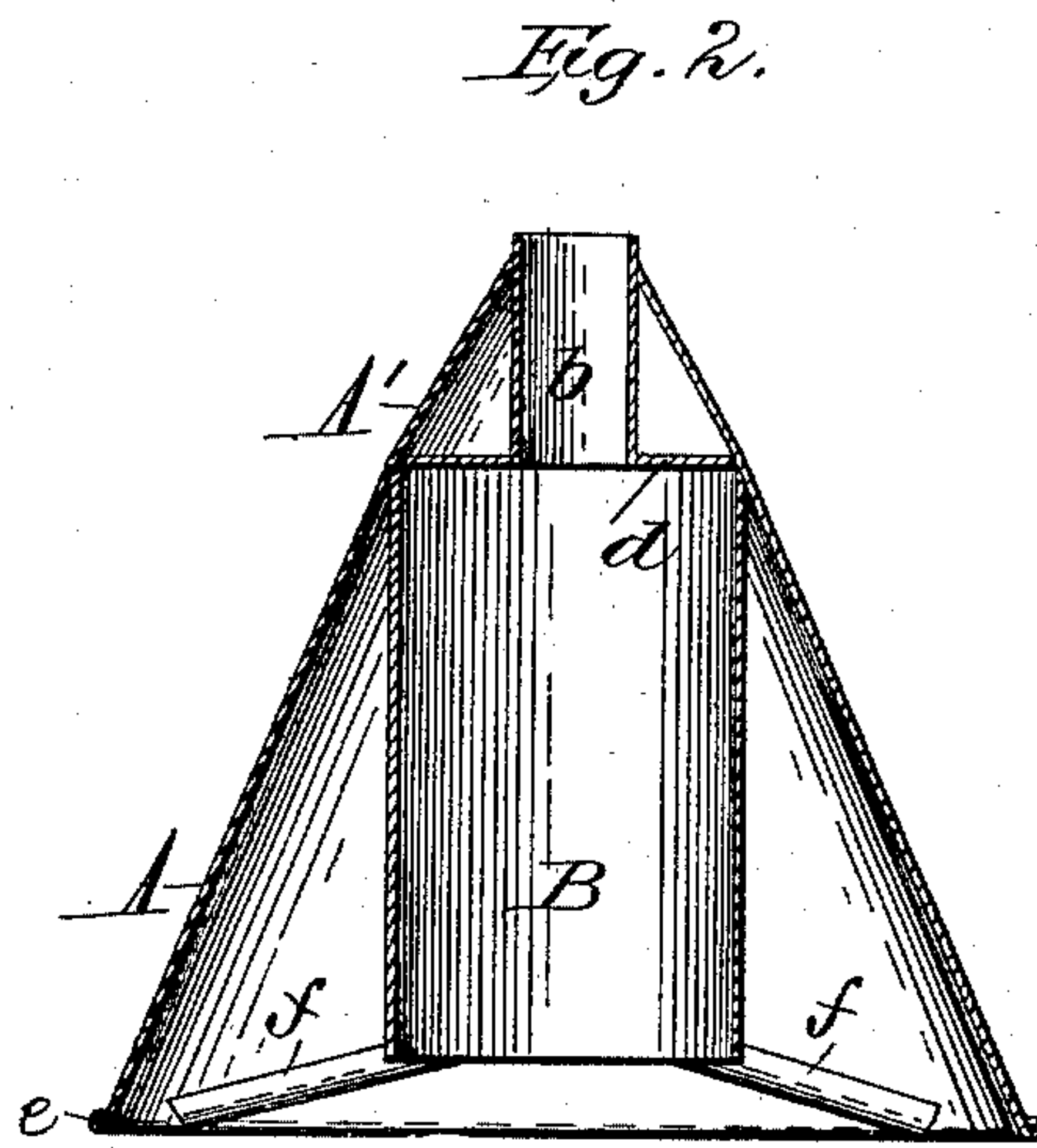
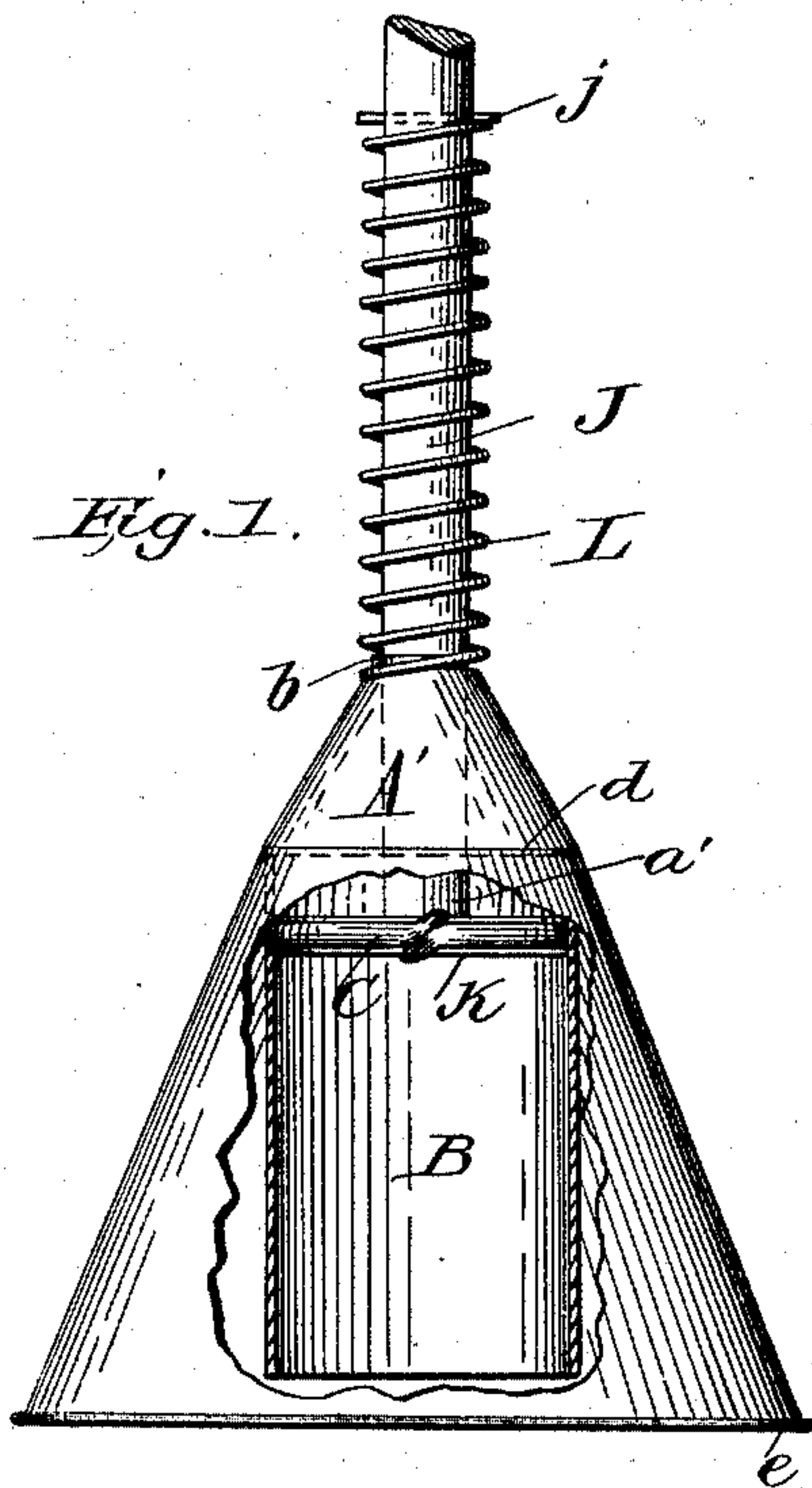


Fig. 6.

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UNITED STATES PATENT OFFICE.

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CLOTHES-POUNDER.

SPECIFICATION forming part of Letters Patent No. 524,422, dated August 14, 1894.

Application filed January 31, 1894. Serial No. 498,562. (No model.)

To all whom it may concern:

Be it known that I, NATHAN D. LEWIS, a citizen of the United States, residing at Walnut Springs, in the county of Bosque and State of Texas, have invented certain new and useful Improvements in Clothes-Washers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention consists in a new and improved clotheswasher, embodying several new and valuable features; and the invention will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a side view of the clothes washer; partly broken away to show the piston. Fig. 2 is a central vertical sectional view of the same with the piston removed. Fig. 3 is a perspective view of the piston. Fig. 4 is a central sectional view of the same. Figs. 5 and 6 are detail views on an enlarged scale.

The same letters of reference indicate corresponding parts in the several figures.

Referring to the several parts by their letters of reference:—The outer cone of my invention, which is usually about eight or nine inches in diameter at its base and about ten or twelve inches in height, is formed in two parts, A and A', the main body A extending up to the upper end of the inner cylinder B, while the part A' extends up at an increased angle from the body A, running from the top of the cylinder B up to the tube b.

d designates a disk or plate having a central opening, which is rigidly secured to the top of the cylinder B, closing the same. The tube b extends at its lower end through the central opening of the plate d and is rigidly secured thereto, said tube extending up through the upper end of the part A', and rising a short distance above the same, being rigidly secured to said part. Said tube is of proper diameter and length to form a guide for the handle or piston-rod J.

e indicates the usual strengthening wire around the lower end of the cone.

The lower end of the cylinder B extends to within about one inch of the lower end of the cone A, and is left open, and securely braced in position by the braces f, triangular in cross-section and extending from the lower end of the cylinder B to the lower end of the cone A, as shown.

The piston rod J extends down through the guide-tube b, and on its lower end is secured the piston. This piston, which plays up and down in the cylinder B, is formed of two circular plates K, K, secured together and having their edges flared outwardly to form a groove, K', extending around the periphery of the piston-disk. A small aperture, K², is formed through the body of the piston at a point near its edge, and two recesses or small openings, K³, K³, are formed in the opposite flaring edges k of the disk near the retaining aperture K², as clearly shown in the drawings.

The removable packing strip, C, which completes my piston, may be formed of a strip of any suitable material, but I preferably employ a piece of domestic about one and one-half inches wide, which is rolled or twisted round. This packing is almost instantly placed in position by passing its ends through the small hole K² from opposite sides of the piston disk, the packing-strip being placed in the edge groove of the piston, and fitted in the notches or edge-recesses K³, K³, as shown in the drawings, when the oppositely-extending ends of the packing-strip are drawn tight. The surplus ends of the packing strip are then cut off, and the piston is complete. The ends of the packing strip stop or close the small retaining aperture K² through the disks completely, preventing the passage through it of any water. a' is a socket for the attachment of the piston-rod.

A long spiral spring, L, of sufficient strength, encircles the piston rod J as shown, with its lower end resting upon the upper end of the cone, and its upper end bearing against a removable pin j which extends transversely through the handle rod J a proper distance from the piston, so that the spring L will raise the piston to the upper end of the cylinder B. Said spring L is of proper elasticity to allow the piston to be forced to the lower end of the cylinder B, and is coiled a proper number of

coils to the inch so that it will be entirely compressed at the moment when the piston is near the lower end of the cylinder B to prevent said piston from being disengaged from the lower end of the cylinder when pressed down in use.

The operation of my clothes washer is as follows:—The clothes are first put in a tub after which hot soap suds are poured over the clothes;—the clothes are gone over in the tub with the washer, pressing down the piston handle and allowing the spring L to automatically lift or raise it. This operation forces the water and steam through the meshes of the clothes twice, that is, the down stroke of the piston forces the water and steam out of the cylinder and down toward the bottom of the tub through the meshes of the fabrics, and the up stroke of the piston creates a suction and causes the water to rush back through the fabrics into the cylinder. After operating the washer over the clothes in the tub of hot water until the dirt is thoroughly forced out of the fabrics, the clothes or fabrics are then put into a tub of rinsing water and the same process repeated with the washer; then the clothes are run through a wringer, which completes the operation.

From the foregoing description, taken in connection with the accompanying drawings, the operation of my invention will be readily understood, and also the great simplicity of its construction, notably in the piston, where the ease with which the packing can be adjusted in position, or removed and replaced by a new

packing when worn, will be readily appreciated. The entire piston consists practically of only two simple parts:—the piston-disk and the plain single packing strip. The packing can be adjusted, as described, in one minute; and when worn through long use can be instantly removed and replaced by a new packing cord or strip, with the greatest ease and economy. The invention operates with rapidity and great effectiveness, and cleanses the clothes or fabrics thoroughly from all dirt.

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

In a clothes pounder the combination with a cylinder, of a piston composed of two disks secured together and having their opposing edge portions outwardly flared or beveled, and having openings in the disks in coincident relation close to the edge and having notches in the flaring edges of the disks contiguous to the said openings, the said notches being disposed the one in advance of the other, and a packing strip fitted in the groove provided by the flaring edges of the disks and having its ends passed through the notches and the opening in the piston from opposite sides, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

NATHAN D. LEWIS.

Witnesses:

EVANS DAZEY,
W. R. BOOTH.