

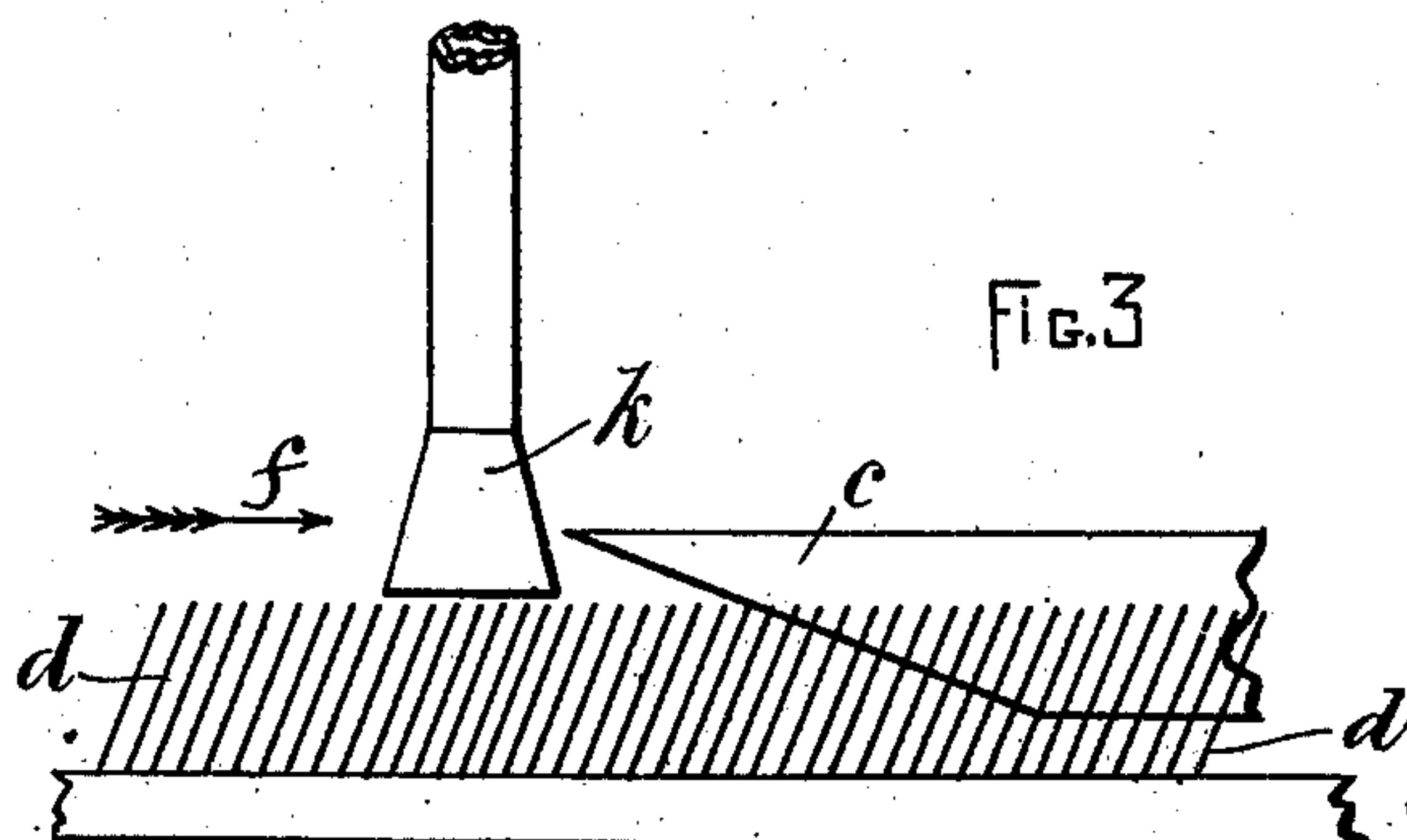
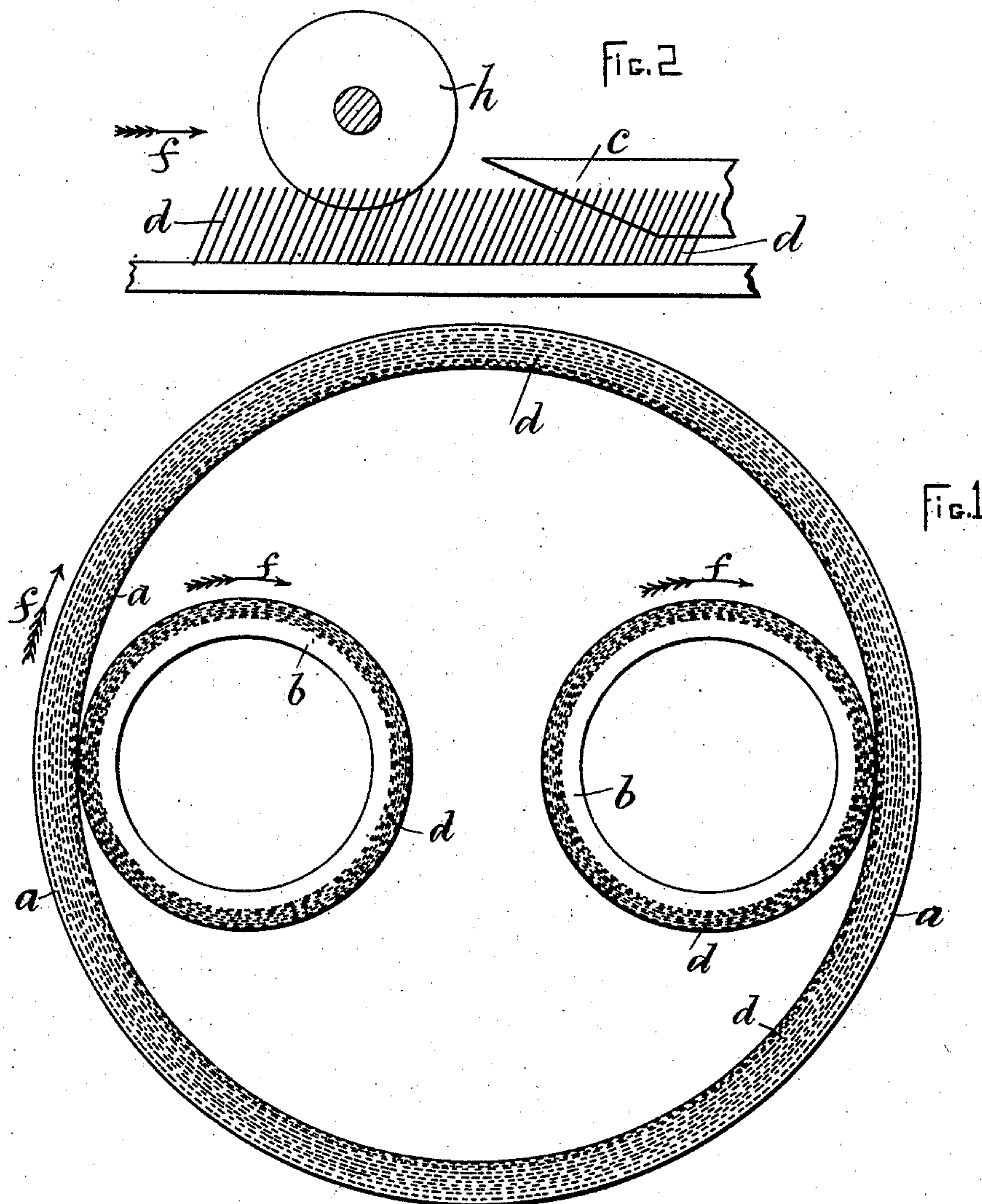
No. 702,302.

Patented June 10, 1902.

I. HEY.
COMB FOR COMBING MACHINES.

(Application filed Nov. 29, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ISHMAEL HEY, OF OAKWORTH, ENGLAND.

COMB FOR COMBING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 702,302, dated June 10, 1902.

Application filed November 29, 1901. Serial No. 84,019. (No model.)

To all whom it may concern:

Be it known that I, ISHMAEL HEY, a subject of the King of Great Britain, and a resident of Lower Laithe, Oakworth, near Keighley, in the county of York, England, have invented certain new and useful Improvements in Combs for Combing-Machines, of which the following is a specification.

This invention relates particularly to that class of combing machinery known as of the "Noble" type; and it consists in an improved construction of the circular combs employed therein by means of which the operation of forcing the fibrous substances to be combed or treated down into the interstices or openings between the comb's teeth or pins is facilitated, and my said improved combs are constructed as illustrated by the accompanying sheets of drawings, in which—

Figure 1 is a top view illustrating the kind of circular combs to which my invention has reference and shows same in their relative positions. Fig. 2 is a side elevation, drawn to an enlarged scale, of a part of one of said comb's circles and shows one form of mechanism for forcing the fibrous substances down between the teeth of the combs, which may with advantage be employed in connection with my invention. Fig. 3 is a similar view to and drawn to the same scale as Fig. 2, but illustrates another device for forcing down the fibers between the teeth or pins of said circles.

Similar letters of reference indicate similar parts throughout the several views.

As is well understood, the movement of the combs *a* and *b* beneath the incline pieces *c*, which are employed for forcing the fibrous substances down between the teeth or pins *d* of said combs *a* *b*, causes a reactionary force to be exerted upon said teeth *d* in the opposite direction to that in which the combs *a* and *b* travel, such direction of the motion of said

combs *a* and *b* being indicated by the arrows *f* in the several figures. To enable these teeth or pins *d* to withstand more effectively said reactionary forces, as well as to greatly facilitate their entrance into the masses of fibrous substances subjected to them for treatment and which they have to enter or pass through, I mount the said pins *d* upon their bases so that they shall point somewhat in the direction in which they travel instead of mounting them to extend vertically from said base-pieces and at right angles to their path of motion, as has heretofore been the case. By thus mounting the teeth or pins *d* the direction of the forces acting upon them to press the fibrous substances, as described, will be more nearly in a direct line with their longitudinal axes than is the case when said teeth *d* are mounted as heretofore, while their sharpened points are brought into position for piercing their several paths through the said fibrous substances as same are being held against their actions by the inclined pieces *c* and that whether the well-known arrangements of disks *h* or that of the windblast *k* are employed for bringing and keeping said fibrous substances into contact with said pieces *c*.

Having thus described the nature and object of my invention, what I claim is—

In combing machinery of the class described, combs having their pins or teeth leaning in the direction of or toward their path of motion, in combination with incline pieces located in the path of movement of said pins or teeth and the fibrous substances carried thereby.

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

ISHMAEL HEY.

Witnesses:

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