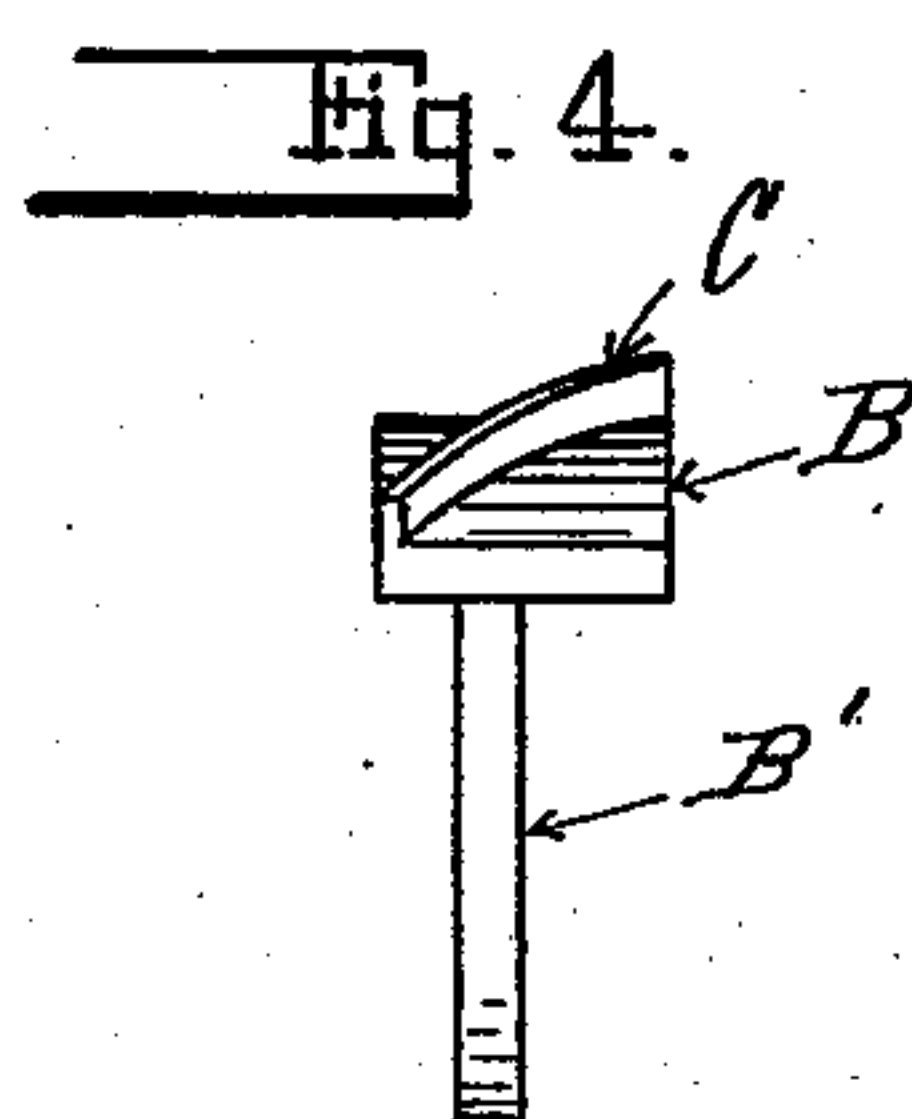
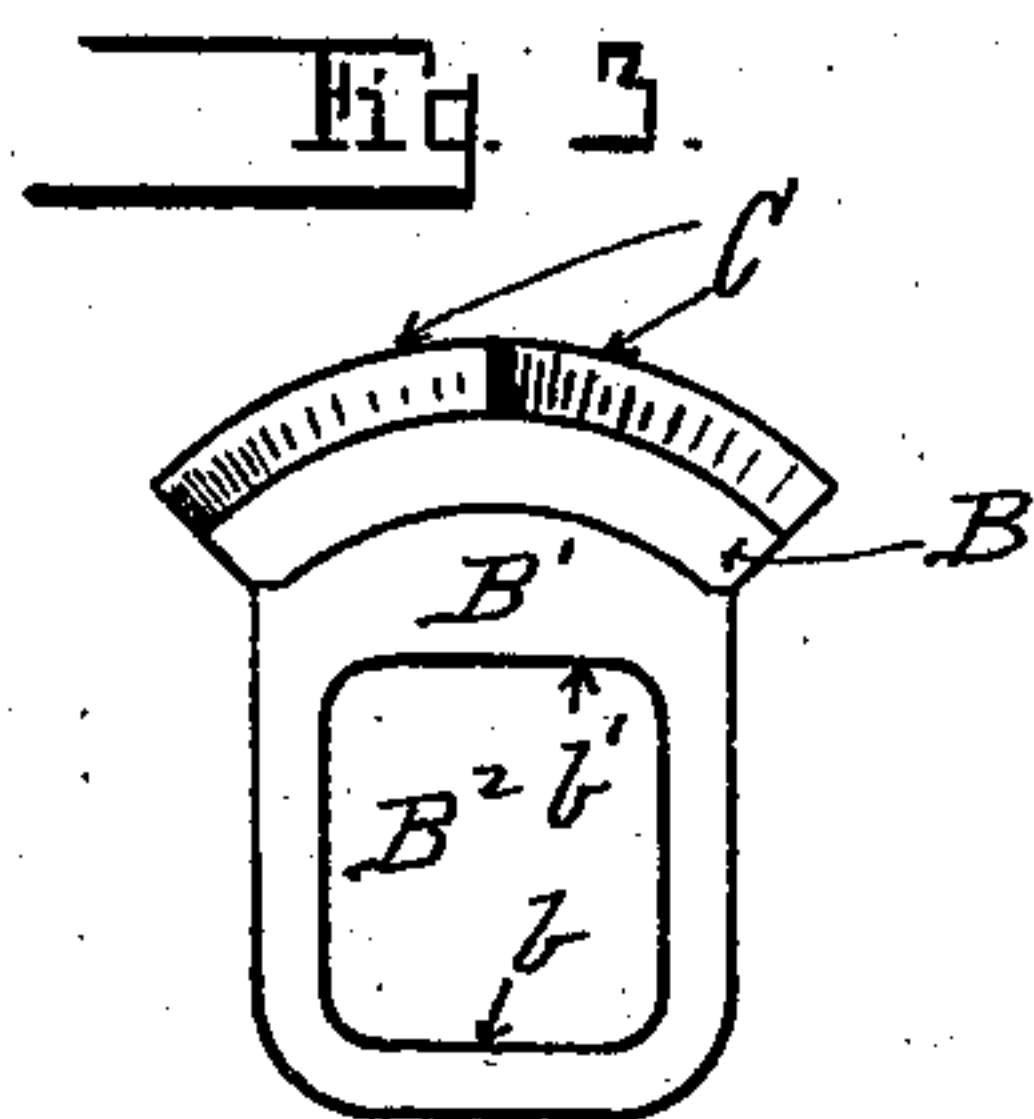
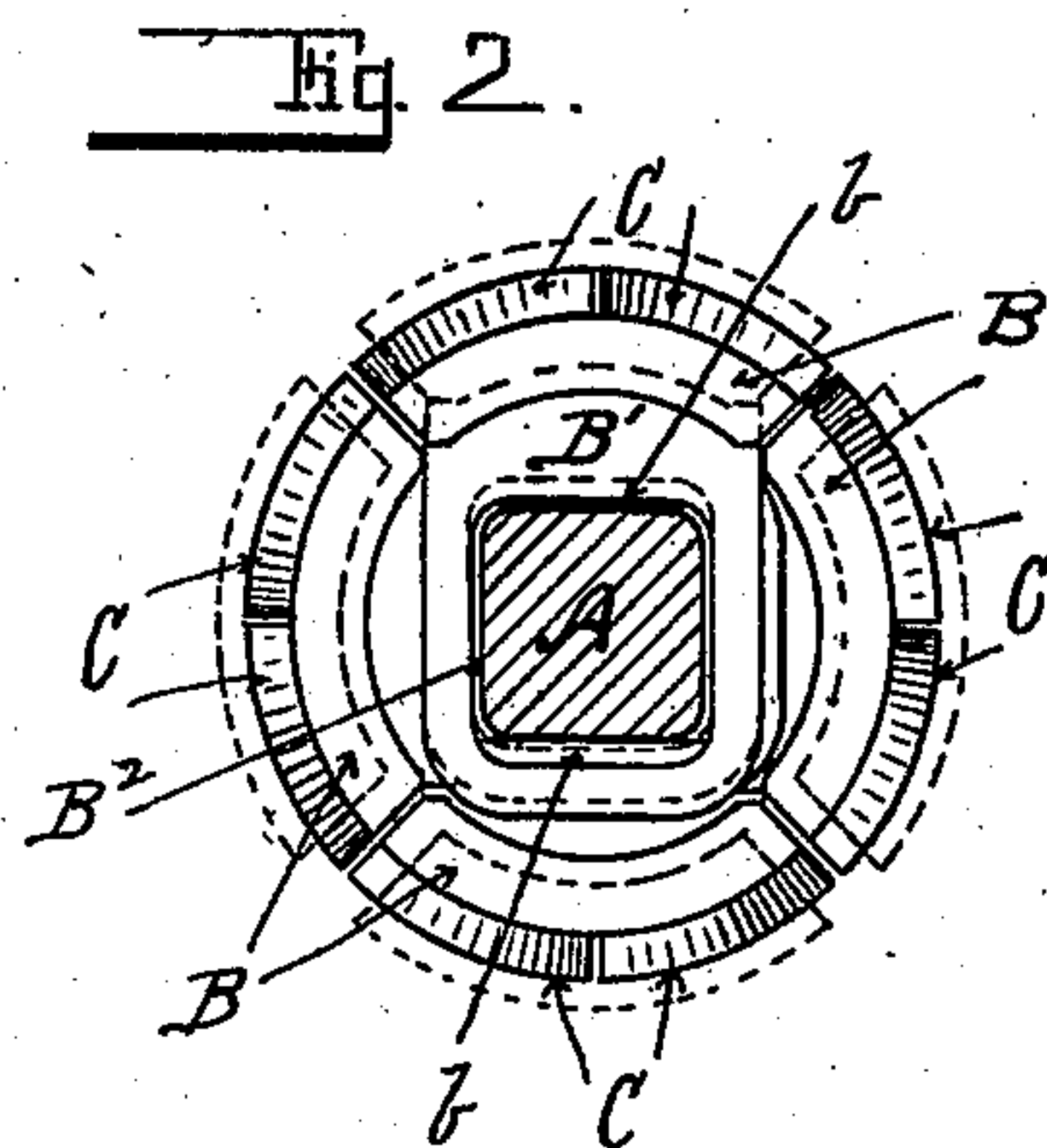
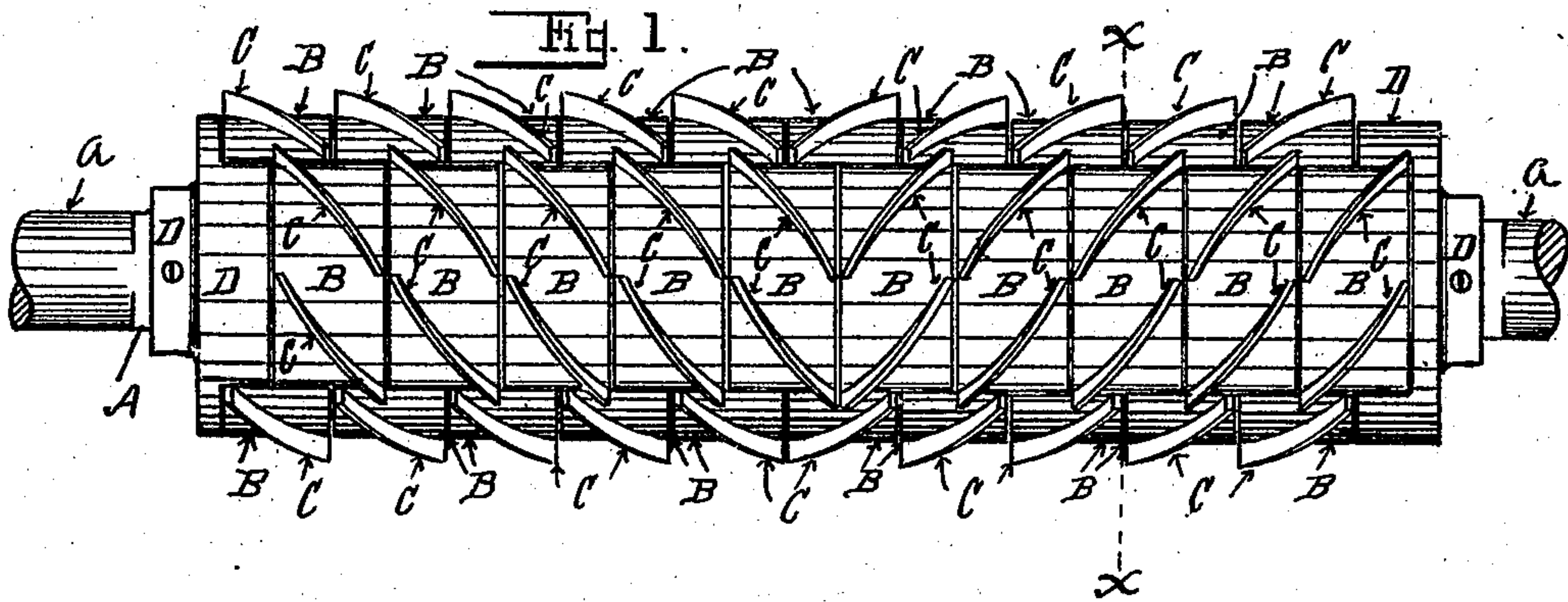


No. 847,616.

PATENTED MAR. 19, 1907.

E. F. SMITH.
CYLINDER FOR HIDE FLESHING MACHINES.
APPLICATION FILED APR. 5, 1906.



Witnesses.

Florence Stockart.
G. J. Mead

Inventor.

Edward F. Smith
By J. C. & M. M. Sturgeon
Attys.

UNITED STATES PATENT OFFICE.

EDWARD F. SMITH, OF CORRY, PENNSYLVANIA.

CYLINDER FOR HIDE-FLESHING MACHINES.

No. 847,616.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed April 5, 1906. Serial No. 310,192.

To all whom it may concern:

Be it known that I, EDWARD F. SMITH, a citizen of the United States, residing at Corry, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Cylinders for Hide-Fleshing Machines; and I do hereby 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, forming part of this specification.

My invention relates to improvements in cylinders for hide-fleshing machines.

Heretofore the cylinders of hide-fleshing machines have ordinarily been made with a continuous rigid periphery provided with diagonal blades which acted upon the hides as they pass between the cylinder and a pressure-roll; but with such cylinders it is impossible to properly flesh the thicker and thinner portions of the hide at one operation. To overcome this difficulty, I have produced a cylinder for hide-fleshing machines the surface or periphery of which consists of short segments or sections provided on their peripheries with blades and radially movable with relation to the periphery of the cylinder, so that they will move in and out toward and away from the center of the axis of the cylinder, and thereby adapt themselves to the varying thicknesses of the different parts of the hide passing between the cylinder and the pressure-roll, so as to properly flesh all parts of the surface thereof.

The features of my invention are hereinafter set forth and explained and are illustrated in the accompanying drawings, in which—

Figure 1 is a view in elevation of my improved cylinder. Fig. 2 is a transverse section of the same on the line xx in Fig. 1. Fig. 3 is an end view in elevation of one of the sections of the cylinder. Fig. 4 is a side view in elevation of the same.

In the drawings illustrating my invention, A is the shaft of the cylinder. This shaft is square between the journals $a a$ at the ends thereof. On the square portion of the shaft A, I place segments or sections B, each of which preferably forms about one-fourth of the circumferential surface of the cylinder and such portion of its length as is desired. These sections B (see Figs. 2, 3,

and 4) are each provided with an inwardly-extending plate or shank B' , provided with a rectangular opening B^2 , which is of such width transversely that it fits closely against opposite sides of the square shaft A; but in the opposite direction, or radially, the opening B^2 is wider than the shaft A, so that the shank or plate B' , carrying the segment B, will slide outward or inward, as the case may be, until the parts b or b' of the opening B^2 contact with the sides of the square shaft A. This admits of the movement of the segments or sections B inward and outward, as illustrated by dotted lines in Fig. 2, each independently of the other. It will also be observed that the longitudinal joints between the segments B are overlapped by the segments B adjoining them circumferentially. The segments or sections B are provided with peripheral blades C, which are arranged diagonally thereon in opposite directions from the center of the cylinder toward the ends thereof, so that they will operate upon the hide to stretch it sidewise from the center of the cylinder. The cylinder is built up of these segments or sections B, which are placed upon the shaft A in their proper order and secured in place, preferably by means of collars D D at the ends of the cylinder or by other convenient mechanism.

In operation when the cylinder is rotated the sections B are moved outward by centrifugal force, as illustrated by dotted lines in Fig. 2, and if a hide is passed between the cylinder and the pressure-roll of a hide-fleshing machine some of the segments B will be forced inward as the cylinder revolves by contact with the thicker portions of the hide, while others of said sections will remain more or less near their outermost traverse and will contact with the thinner portions of the hide, so that all parts of the hide will be properly fleshed.

It is obvious that the construction of the different parts of my improved cylinder may be considerably varied without departing from the spirit of my invention, and it is also obvious that a cylinder embodying this invention will operate substantially the same in a leather-shaving machine as in a hide-fleshing machine.

Therefore what I claim as new, and desire to obtain by Letters Patent of the United States, is—

1. The combination in a cylinder for hide-fleshing machines, of a shaft, cylinder-se-

tions mounted thereon so as to be freely movable radially to said shaft by centrifugal force, and blades on the peripheries of said sections, substantially as set forth.

5 2. The combination in a cylinder for hide-fleshing machines, of a rectangular shaft, cylinder-sections mounted thereon so as to be capable of radial movement, blades on the peripheries of said sections, and means for
10 securing the sections in place on the shaft, substantially as set forth.

3. The combination in a cylinder for hide-fleshing machines, of a rectangular shaft, a cylinder-section, blades on the periphery of
15 said section, a shank or plate thereon having a rectangular opening therein laterally of a width to fit the shaft, and radially or longitudinally of greater length than the width of the shaft, substantially as set forth.

20 4. The combination in a cylinder for hide-fleshing machines, of a rectangular shaft, a series of segments or sections forming the circumferential surface or periphery of the cylinder, blades on the peripheries of said sec-

tions, and shanks on said sections connected 25 with said shaft and movable radially thereon, substantially as set forth.

5. The combination in a cylinder for hide-fleshing machines, of a rectangular shaft, journals on the ends thereof, a series of seg- 30 ments or sections arranged on the shaft in rows so as to form the circumferential surface or periphery of the cylinder, and with the longitudinal meeting joints of one row substantially opposite the middle of its cir- 35 cumferentially - adjoining section, diagonal blades on the peripheries of said sections, shanks on said sections embracing said shaft and radially movable thereon, and means for securing said cylinder-sections longitudinally 40 in place on the shaft, substantially as set forth.

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

EDWARD F. SMITH.

Witnesses:

C. R. POWELL,

D. J. ALEXANDER.