

No. 863,967.

PATENTED AUG. 20, 1907.

E. C. CLARK.
ASH SIFTER.

APPLICATION FILED JAN. 14, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

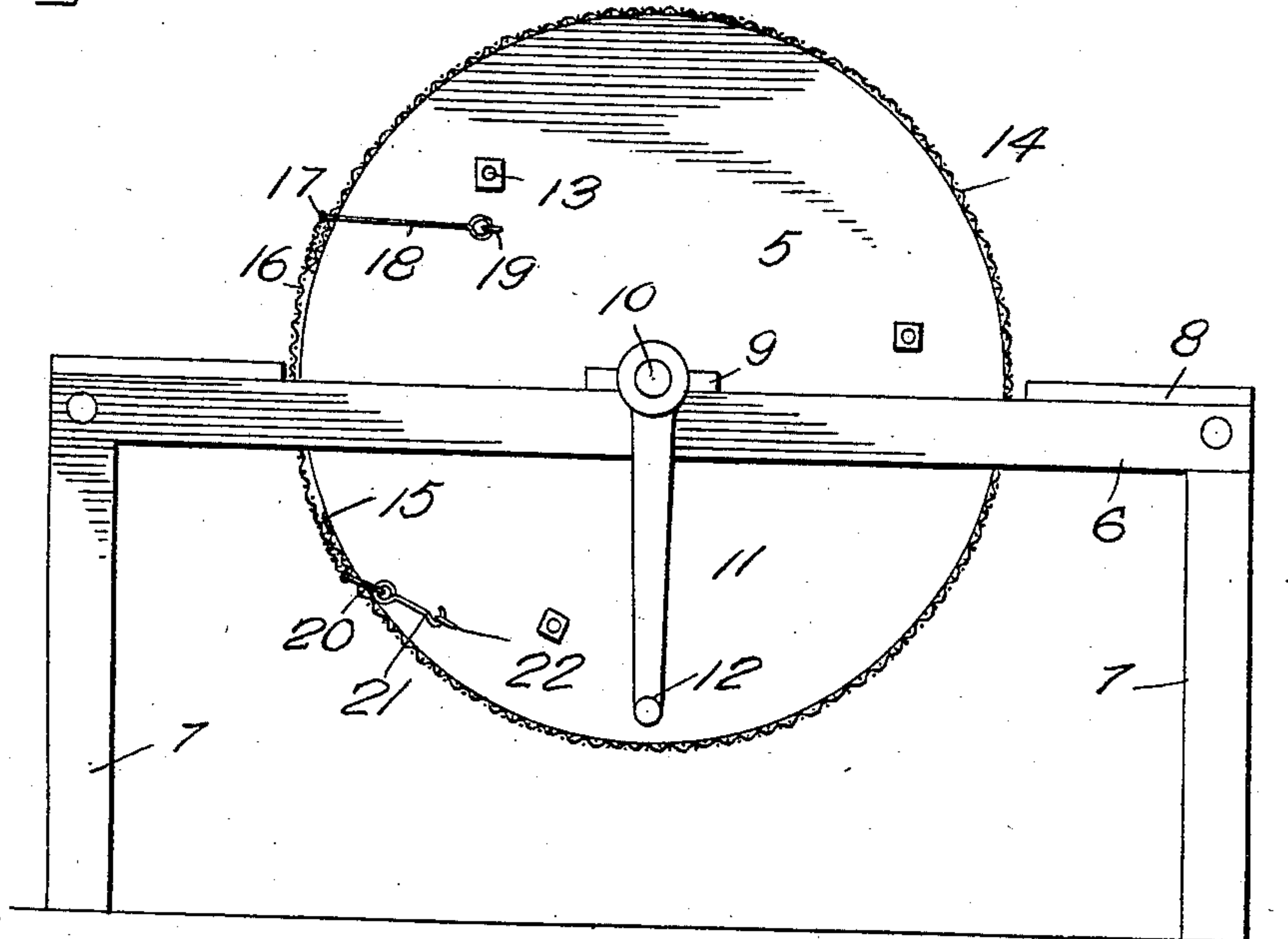
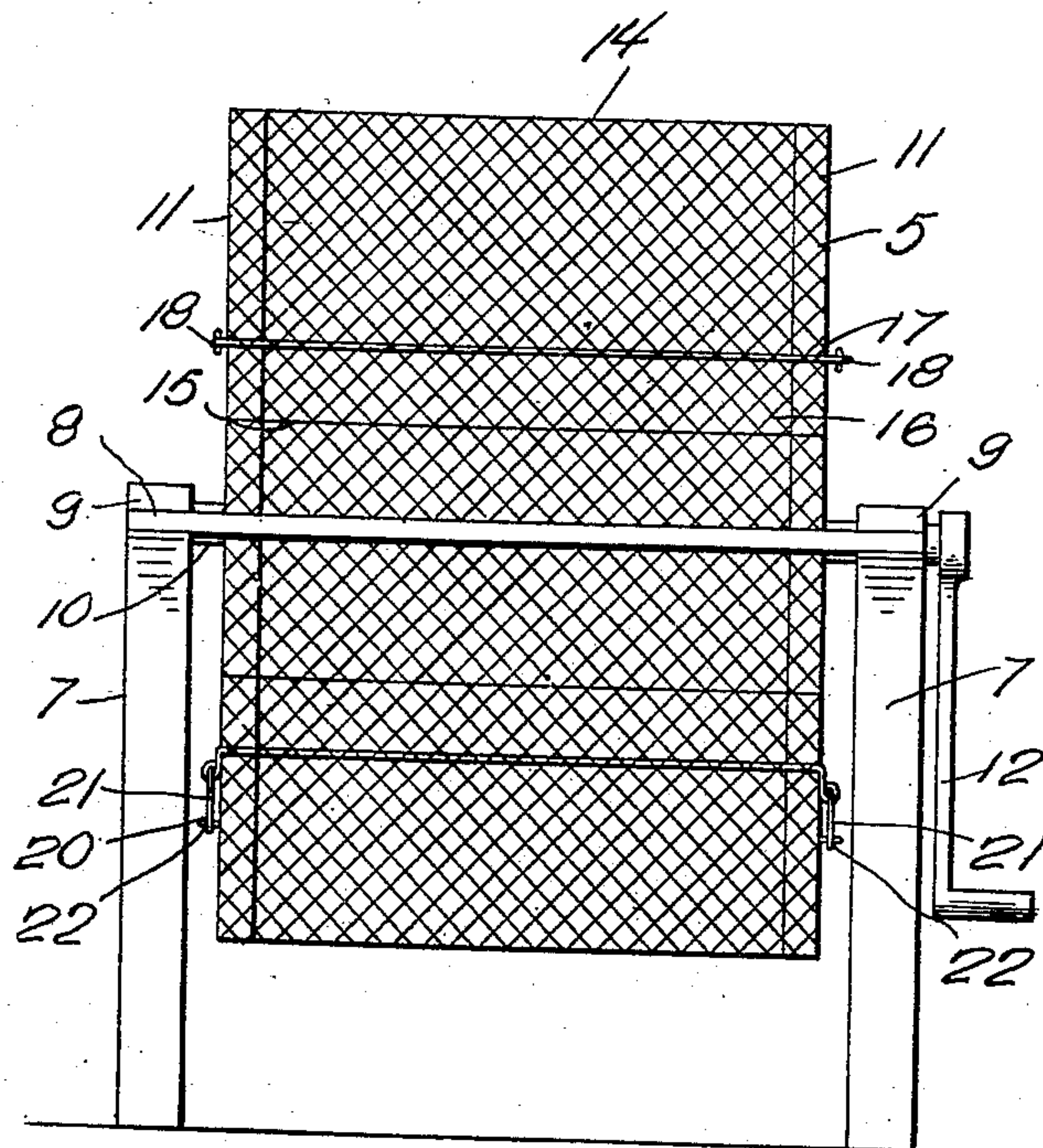


Fig. 2.



Inventor

Witnesses

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By *[Signature]*

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2 SHEETS—SHEET 2.

Fig. 3.

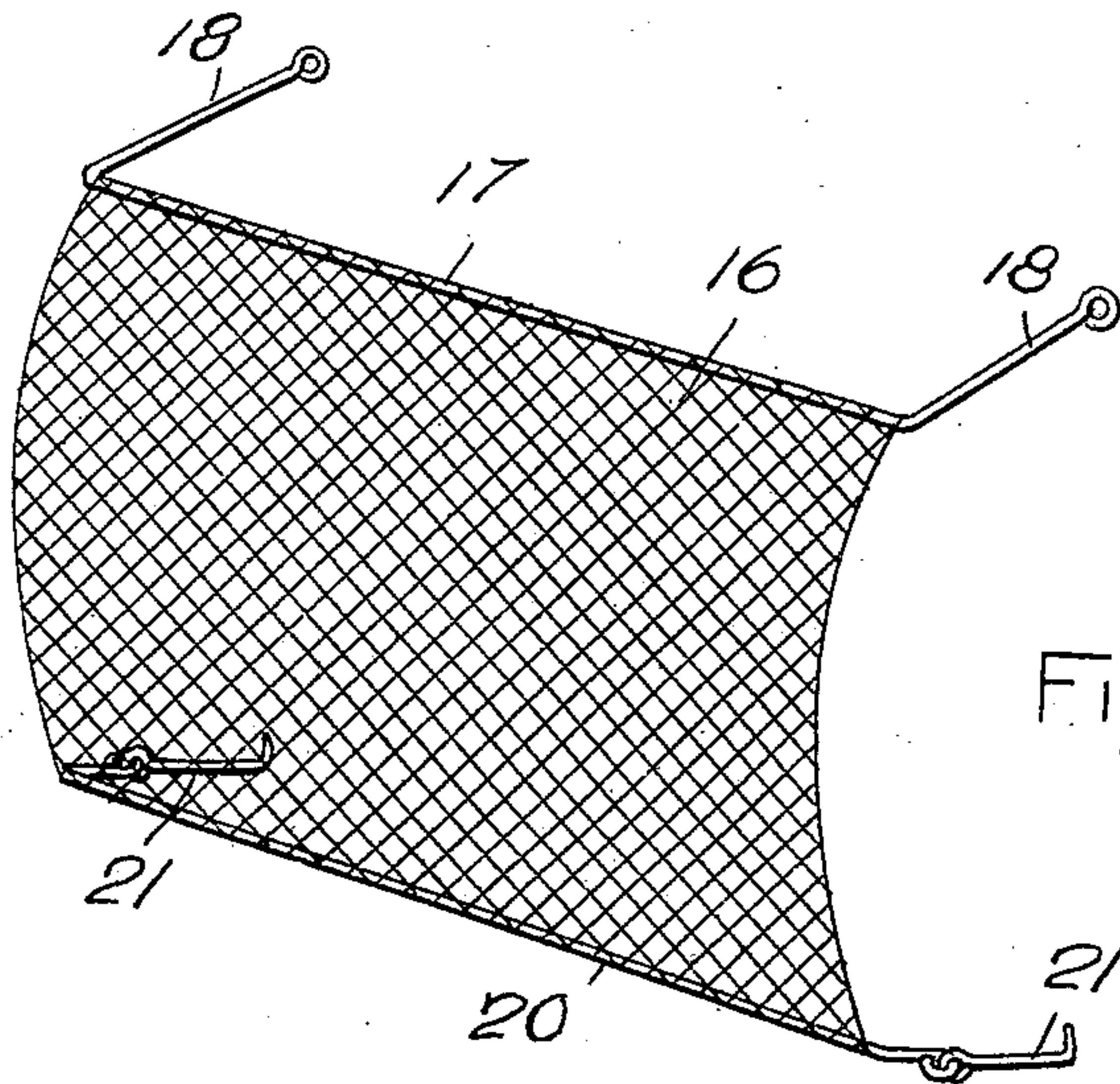
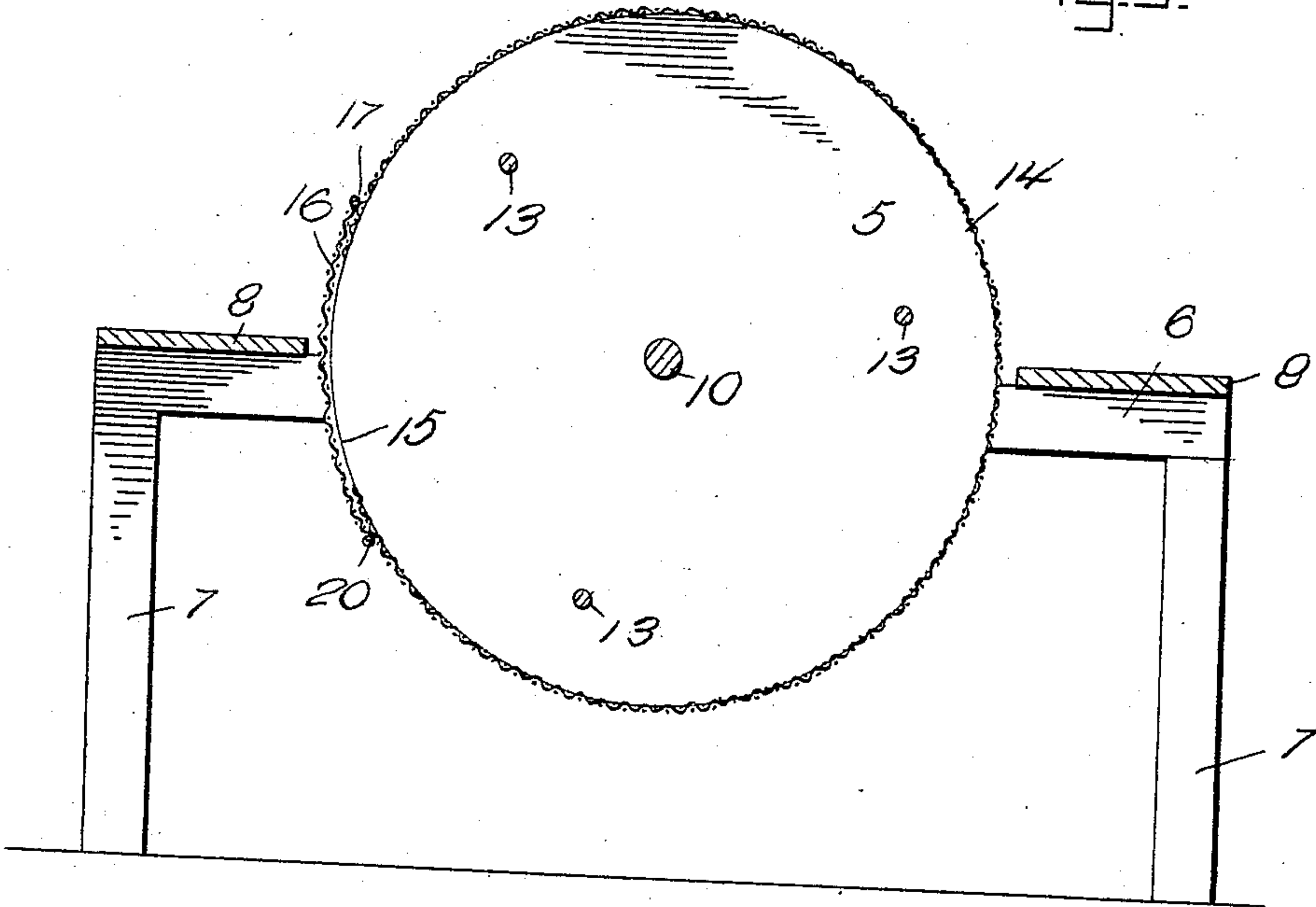


Fig. 4.

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UNITED STATES PATENT OFFICE.

EDWARD C. CLARK, OF PHILADELPHIA, PENNSYLVANIA.

ASH-SIFTER.

No. 863,967.

Specification of Letters Patent.

Patented Aug. 20, 1907.

Application filed January 14, 1907. Serial No. 352,247.

To all whom it may concern:

Be it known that I, EDWARD C. CLARK, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia, State of Pennsylvania, have
5 invented certain new and useful Improvements in Ash-Sifters; 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.

10 The present invention relates to improvements in ash sifters, and more particularly to devices of that class comprising a screening cylinder rotatably mounted on a supporting frame, the object of the invention residing in the provision, in such a device, of means for
15 breaking up or crushing the soft ash to pieces sufficiently fine to pass through the meshes of the screen.

A further object of the invention consists in the provision of a swinging door or cover, which, when moved into open position will not catch or kink the wire of the
20 main or rotating screen.

With the above and other ends in view, the invention consists in the construction, combination, and arrangement of parts, all as hereinafter fully described, specifically claimed and illustrated in the accompanying
25 drawings, in which like parts are designated by corresponding reference numerals in the several views.

Of the said drawings—Figure 1 is a side elevation of the present invention. Fig. 2 is an end elevation thereof. Fig. 3 is a vertical section taken centrally
30 through Fig. 2. Fig. 4 is an enlarged detail perspective view of the swinging door and its attendant parts.

Referring more particularly to the drawings, the screen cylinder, which is generally designated 5, is shown as rotatably mounted upon a supporting-frame
35 comprising a pair of longitudinal sills 6, carried by up-rights 7, the sills being connected by a pair of cross-beams 8.

Mounted upon the upper face of the sill 6 is a pair of bearings 9, in which the opposite ends of the cylinder
40 shaft 10 are journaled, said shaft passing through aligning openings formed axially in the iron disks 11, which form the sides of the cylinder. One end of shaft 10 extends beyond the corresponding bearing and carries an actuating handle 12, by means of which the cylinder is
45 rotated. The disks 11 are further connected by means of a series of transversely disposed bolts 13, which are arranged in spaced relation to the peripheral surfaces of said disks. In the present instance, three such bolts are shown, though it will be understood that this num-
50 ber may be increased at will.

The usual screening fabric 14, preferably formed of wire netting, is secured to the peripheries of the disks,

its ends, however, falling short of each other to provide a charge opening 15, across which a cover 16 is bodily
movable to open or close the same, this cover being 55 likewise formed of wire netting and secured at one end to the connecting portion of a U-shaped strap 17, whose arms 18 are disposed against the outer faces of the opposite disks and are connected thereto, as at 19, in such a manner as to permit the swinging movement of the
60 cover above referred to. In the present instance, the free ends of the strap arms are enlarged to form eyes, which are pivotally engaged with eye-bolts or staples secured to the disks, as shown in Fig. 1.

The opposite end of the swinging cover is secured to
65 a second U-shaped strap 20, the ends of which are likewise bent to fit against the outer faces of the disks 11, and each arm carries a hook 21, pivotally connected thereto and adapted to engage a keeper 22 carried by each disk, such construction permitting the cover to be
70 held immovable when in closed position.

Owing to the mounting of the cover, as above described, it will be obvious that during its movement it cannot catch or engage the main wire netting 14 and kink the same, so that a free movement of the cover is
75 thus possible.

When the cylinder has been charged and the cover locked in place, it will be apparent that when the cylinder is rotated its contents will strike against the several
80 bars 13 and the soft ashes will be crushed and broken thereby until the pieces are of a size sufficiently small to pass through the meshes of the screening fabric or netting. The bars 13 thus serve a double purpose, in that they not only afford a means of connection between the disks or ends of the cylinder, but also effect
85 the crushing and breaking of the pieces of soft ash during the rotation of the cylinder, as above described. It will likewise be obvious that the number of such bars used exercises a direct influence upon the time consumed during the screening operation, as the time so
90 occupied will be materially decreased where a greater number of bars are employed than are shown in the present instance.

Further description of the machine and its operation is deemed unnecessary in view of the foregoing. 95

What is claimed, is—

An ash sifter comprising in combination, a rotatably mounted screening cylinder including a pair of circular disks and a strip of foraminous material secured to the peripheries thereof, the ends of said strip falling short of
100 each other, to provide a charge opening; a U-shaped strap disposed transversely of said cylinder and having its arms disposed against the outer faces of said disks and pivoted thereto adjacent one end of said opening; a foraminous cover secured at one end to said strap and adapted to be 105

5 moved bodily directly across said opening, to open and close the same; a transversely-disposed strap secured to the opposite end of said cover and having its ends bent against the outer faces of said disk; a hook pivoted at each end of said last-mentioned strap; a keeper secured to the outer face of each disk and adapted for engagement with the adjacent hook when said cover is closed; a plurality of transversely disposed bolts connecting said disks and arranged in spaced relation to the peripheries thereof; and

means for rotating said cylinder, to cause its contents to strike against said bolts and be crushed thereby during such rotation. 10

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

EDWARD C. CLARK.

Witnesses:

CHAS. C. WEAKLEY,
GEO. W. FETTERS.