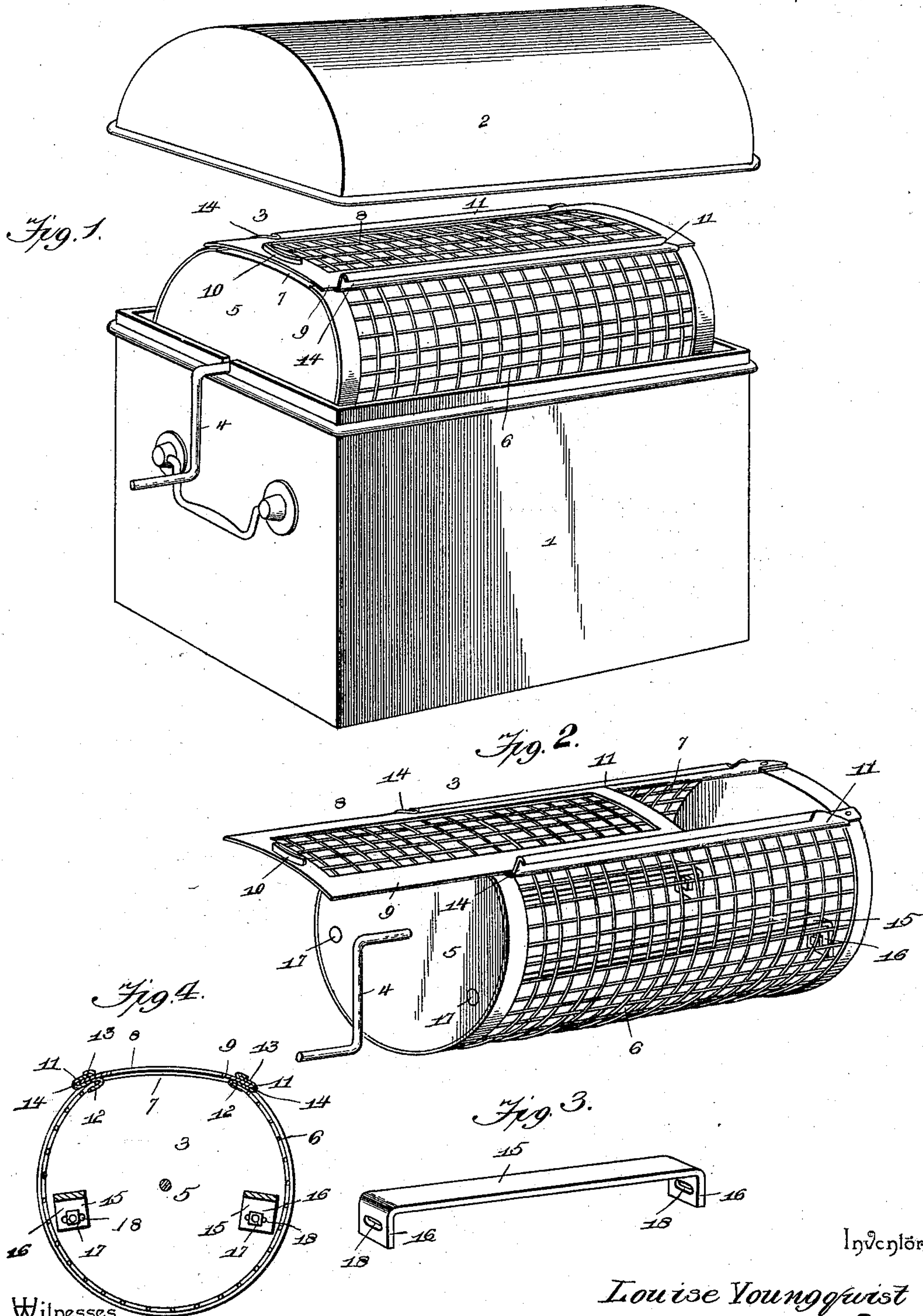


(No Model.)

L. YOUNGQUIST & J. J. JONES.
ASH SIFTER.

No. 561,304.

Patented June 2, 1896.



Inventors

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UNITED STATES PATENT OFFICE.

LOUISE YOUNGQUIST AND JOHN J. JONES, OF MILWAUKEE, WISCONSIN.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 561,304, dated June 2, 1896.

Application filed April 3, 1895. Serial No. 544,319. (No model.)

To all whom it may concern:

Be it known that we, LOUISE YOUNGQUIST and JOHN J. JONES, citizens of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Ash-Sifter, of which the following is a specification.

This invention relates to improvements in ash-sifters which comprise a rotary sieve formed by circular end pieces or heads, having journals by means of which the sieve is mounted in a suitable receptacle and having wire netting or fabric stretched around the edges of the said heads and secured thereto, thereby forming a drum or cylinder, which receives the ashes to be sifted.

The primary object of the invention is to strengthen and stiffen the rotary sieve and provide means for thoroughly and effectually dislodging ashes and other matter from the cinders and coals, and which will at the same time prevent the ashes from following the movements of the sifter, whereby the separating process is effected in a much shorter space of time than is possible with sifters as generally constructed.

Other objects and advantages will appear from the following description and the drawings, forming a part of the specification, and in which—

Figure 1 is a perspective view of the improved ash-sifter, the cover being removed and elevated above the ash-receptacle. Fig. 2 is a perspective view of the rotary sieve, the sliding door being partially drawn out. Fig. 3 is a detail view of a combined stiffening and agitator bar or strip. Fig. 4 is a cross-section of the rotary sieve, showing the relative disposition of the stiffening and agitator bars.

The numeral 1 represents an ash-receptacle, which may have any desired form, being preferably rectangular-shaped, and which may be constructed from suitable material, sheet metal being the best for the purpose because of its fireproof quality. This ash-receptacle is closed by a cover 2 of desired pattern, which in the present instance is curved or arch-shaped.

The rotary sieve 3 has journals at its ends by means of which it is mounted in the ash-receptacle, said journals being fitted in

notches formed in the upper edges of the ends of the said ash-receptacle in the ordinary manner. One of the journals is projected and bent to form a crank 4, by means of which the sieve is rotated when it is required to sift the ashes. The journals of the sieve may be provided in any of the usual ways, the most common being by extending the ends of a rod or shaft passing centrally through the sieve and supported near its ends in the heads of the said sieve. The heads or ends 5 are approximately circular, and around the edge portions thereof is stretched the wire netting or fabric 6, the latter being of a width to correspond to the distance between the outer faces of the said heads and being secured to the edges of the latter in any desired manner. This wire-netting does not extend entirely around the heads, thereby providing an opening 7, by means of which ashes are placed within the sieve and the cinders removed therefrom when required. This opening 7 is closed by a sliding door 8, which comprises a section of wire-netting corresponding to the size of the opening 7, and which has its edge portion strengthened and reinforced by a metal binding 9, a handle 10 being provided at one end of the door to enable the latter to be drawn out when it is required to gain access to the interior of the sieve. The end portions of the wire-netting 6 bordering upon the opening 7 are protected by metal strips 11, which have a portion, as 12, folded to embrace and secured to the said end portions. These metal strips 11 have their outer portions 13 bent in an opposite direction to the folded edge portions 12, so as to form guides 14, in which the door 8 is adapted to slide when opening and closing. Thus it will be seen that the metal strips 11 serve a three-fold purpose—protecting the end portion of the wire-netting 6, forming guides for the sliding door 8, and stiffening and bracing the heads 5.

The combined agitators and braces 15 are bars or strips of metal of suitable width, having their end portions 16 bent substantially at right angles in the same direction and apertured to receive bolts or fastenings 17, by means of which they are secured to the heads 5. These strips or bars are disposed with their greatest width extending inward

from the sides of the sieve, so as to cause an agitation of the ashes and dislodge foreign matter which may have a tendency to cling to the cinders or coals. The openings 18 in the bent ends 16 are elongated in the direction of the width of the strips to admit of a wide range of adjustment of the strips, whereby their position may be varied with reference to the wire-netting 6 and to allow for variation in boring the openings in the heads 5 for the passage of the bolts 17. Thus it will be seen that the strips can be adjusted bodily to and from the wire-netting or turned upon the bolts 17 to any angle, as required. The bent ends 16 normally occur a greater distance apart than the length between the inner sides of the heads 5, so that when in position between the said heads their normal tendency is to separate or spread the said heads, thereby creating a tension on the wire-netting 6 and preventing the latter from sagging or otherwise getting out of shape. In disposing the strips with reference to the sieve they may be located at opposite or at any required point, and may be provided in any required number. In practice two of such strips will be found sufficient, and they will be arranged a proper distance from the metal strips 11 to act in conjunction therewith to strengthen and stiffen the sieve, as will be readily understood.

The strips 15 with the heads 5 form a frame of which the said strips 15 constitute the longitudinal members, and have connection at their ends by means of the single bolts 17, upon which they slide and turn, thereby affording a great range of adjustment as to angle and distance from the sieve-surface.

It will be seen that the sieve constructed as herein set forth will perform the required work in a rapid and satisfactory manner,

and that the shape of the sieve will be maintained under all conditions, and that wet ashes may be sifted with the same facility as dry ashes because the agitators 15 will engage with the cinders and coals and jar the same sufficiently to dislodge and remove the ashes which may have a tendency to cling thereto.

In constructing rotary sieves to be used in connection with ash-receptacles already on the market it will be understood that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

In a rotary ash-sifter, the combination of heads or end pieces, a wire-netting secured thereto, strips extending longitudinally between the heads and exerting a lateral pressure against their inner sides, said strips being comparatively wide and having their end portions bent substantially at right angles and formed with slots extending in the direction of the width of the strips, and single fastenings connecting the ends of the strips with the said heads and operating in the slots, and at the same time forming bearings for the strips to slide and turn upon, whereby they can be adjusted as to angle and distance from the sieve-surface, substantially in the manner set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

LOUISE YOUNGQUIST.
JOHN J. JONES.

Witnesses:

IDA SCHLOEMILCH,
OSCAR SCHLOEMILCH.