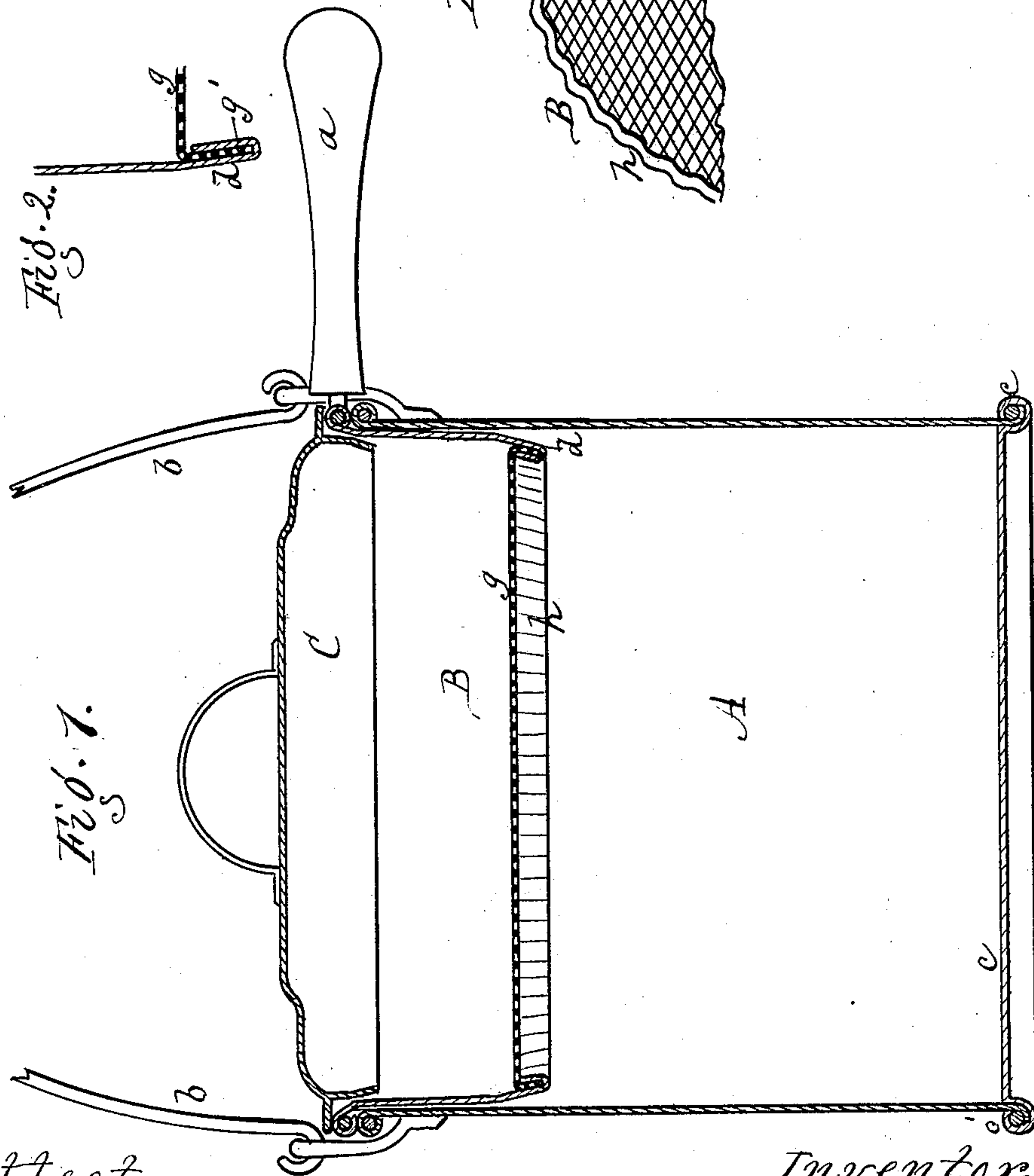
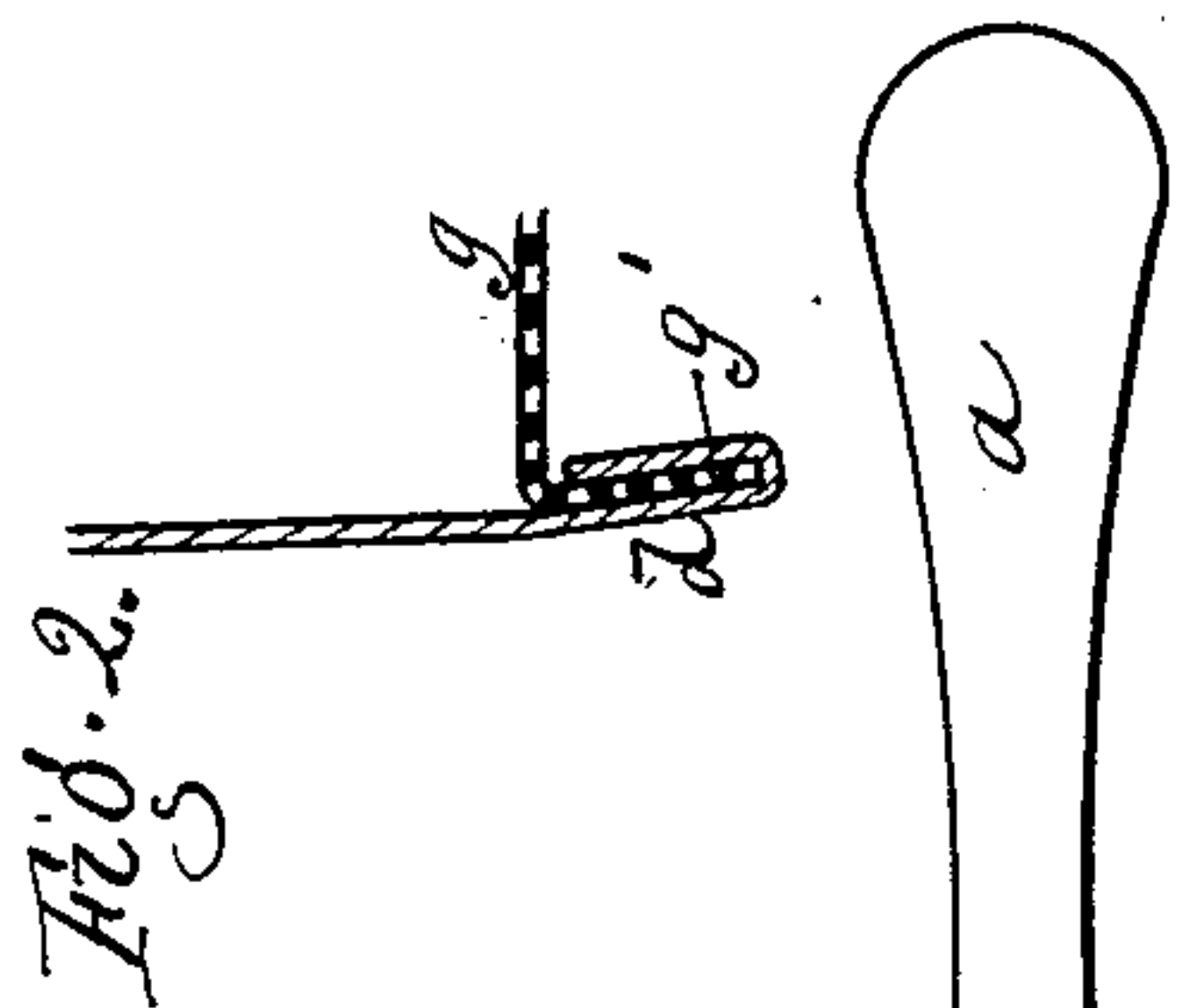
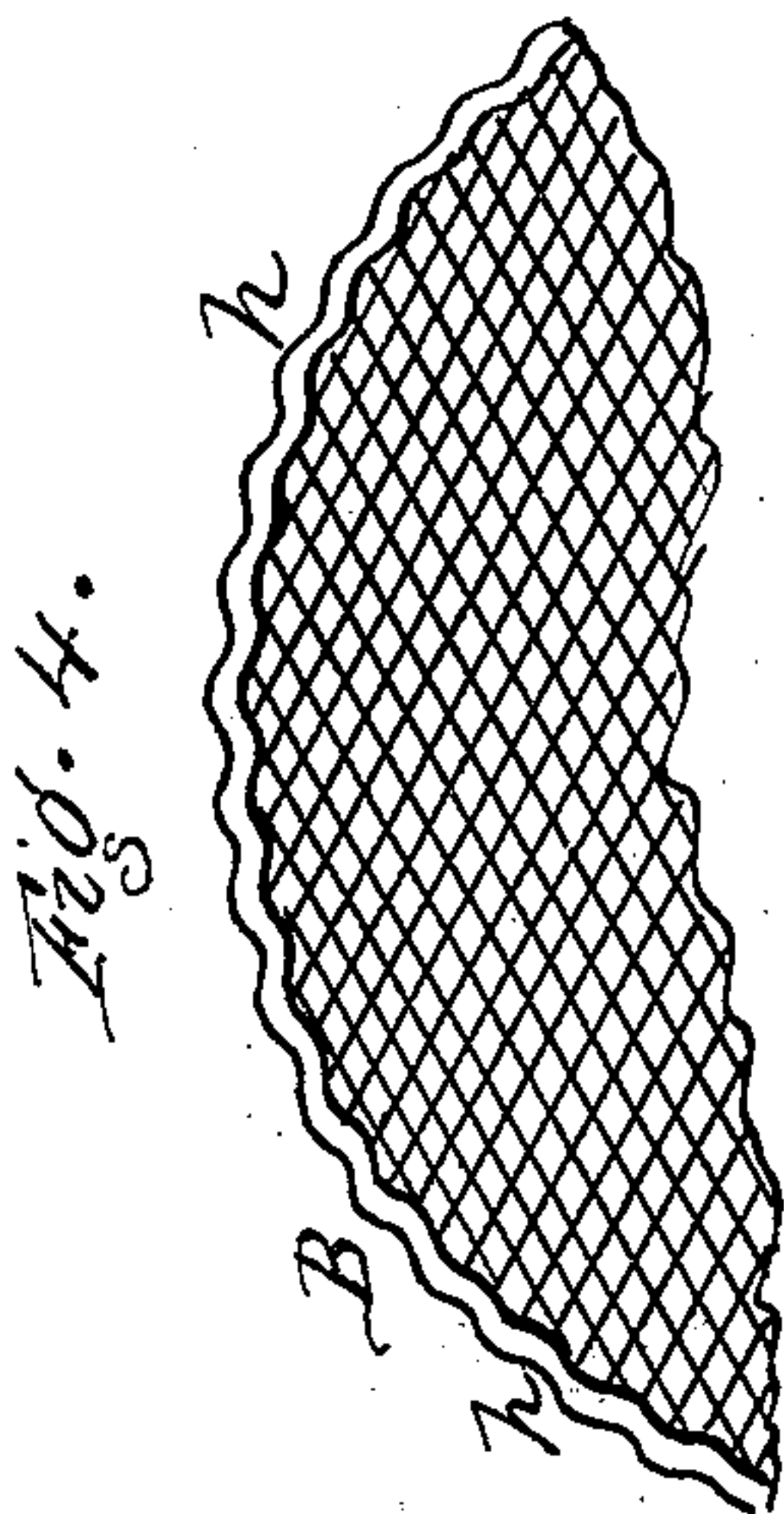
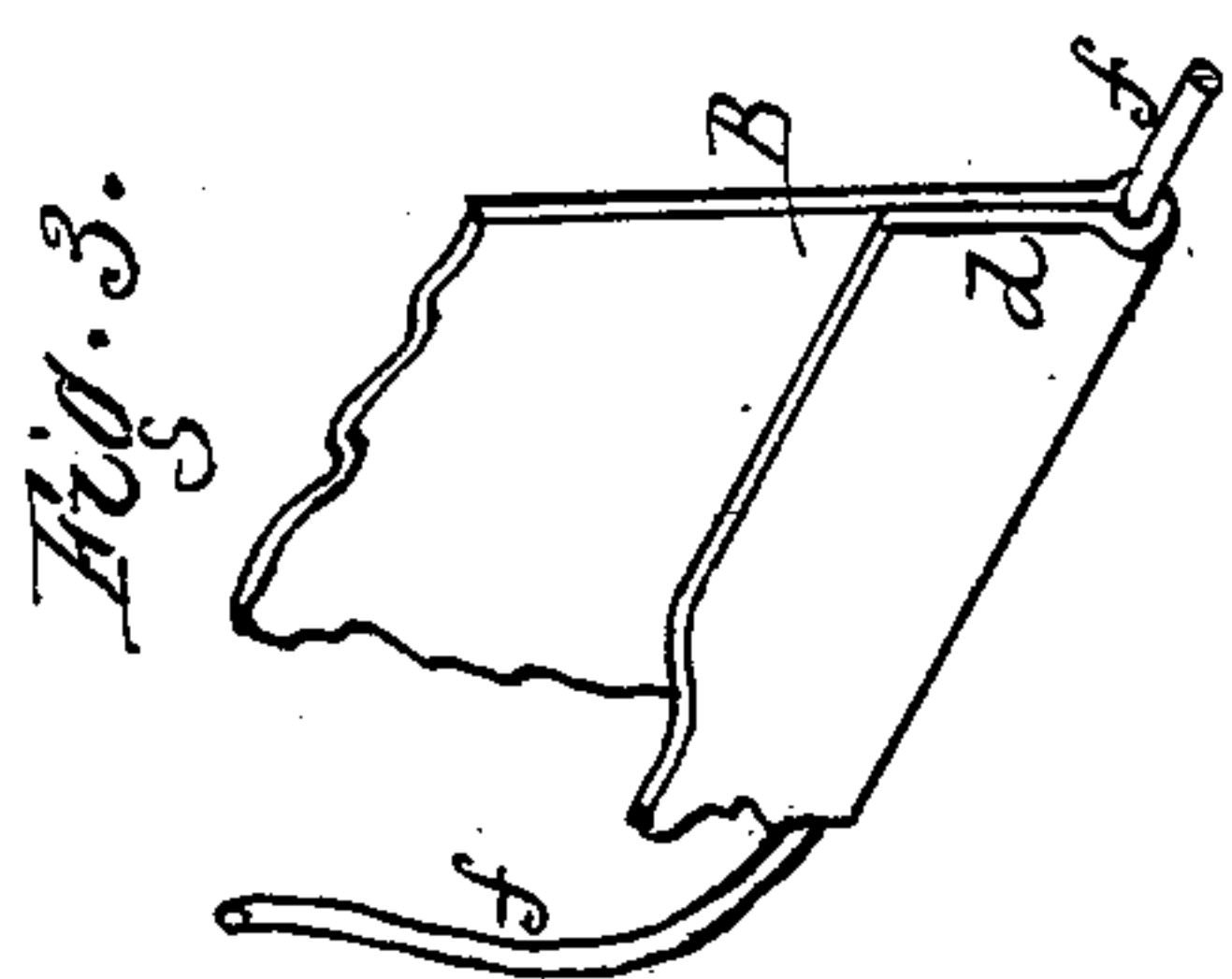


E. P. FOLLETT.
Ash Sifter.

No. 231,030.

Patented Aug. 10, 1880.



Attest.
G. Hubbard
R. E. White

Inventor.
Edward P. Follett
per R. F. Osgood
Atty

UNITED STATES PATENT OFFICE.

EDWARD P. FOLLETT, OF ROCHESTER, NEW YORK, ASSIGNOR OF TWO-THIRDS OF HIS RIGHT TO VAN ZANDT & BIXBY, OF SAME PLACE.

ASH-SIFTER.

SPECIFICATION forming part of Letters Patent No. 231,030, dated August 10, 1880.

Application filed January 19, 1880.

To all whom it may concern:

Be it known that I, EDWARD P. FOLLETT, of the city of Rochester, county of Monroe, and State of New York, have invented a certain new and useful Improvement in Ash-Sifters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a central vertical section of the sifter. Fig. 2 is a section through one edge of the screen or sieve, showing more particularly the method of uniting the wire-cloth with the frame of the screen. Fig. 3 is a diagram, showing the method of folding and opening the screen-frame for the insertion of the wire-cloth. Fig. 4 is a bottom view of a portion of the screen, showing the crimping which holds the wire-cloth in place.

My improvement relates to that class of sifters in which a pail is used having a sifter resting in its top provided with a handle by which it is vibrated axially.

The invention consists in the construction of the screen or sifter having the wire-cloth inserted in a turned-up seam or fold, which is then crimped or corrugated, by which means the wire is securely fastened in place, the edge of the frame is greatly stiffened, and a bevel is produced, by which the entrance of the sifter into the top of the pail is greatly facilitated.

It also consists in the method or process of inserting or securing the wire-cloth in the sifter, which process consists in making a fold in the bottom of the sifter, inserting a flexible wire in the fold, with one end projecting, rolling the fold so as to close it tightly around the wire, then opening or loosening the fold by drawing the wire up and out of the fold, then inserting the right-angled edge of the wire in the fold, and finally crimping or corrugating the edge so as to securely fasten the wire in place, stiffen the edge, and give a bevel or incline to the same to facilitate the insertion of the sifter in the pail, all as hereinafter described.

In the drawings, A represents the pail; B, the sifter, which rests loosely in the top of the pail, and C a cover which rests in the top of the sifter.

The sifter is provided with a handle, *a*, projecting outward over the top of the pail, by which means the sifter is vibrated axially in the pail. The pail is provided with a bail, *b*.

The bottom, *c*, of the pail is a separate piece, which is stamped or formed with a downwardly-projecting flange, which is beaded at the lower edge, as shown at *c'*. The lower edge of the cylinder of the pail is also beaded half way, and rests in the bead *c'*. A wire is then placed in the open bead, and the edge is then run through a wiring-machine, which closes the bead around the wire and secures the parts together.

The top of the pail is wired, and also the top of the sifter, the wired edge of the sifter resting on the wired edge of the pail, which forms a seat and supports it.

My improvement is as follows: The bottom edge of the hoop which forms the sifter B is turned inward and upward, forming the fold *d*, open at the top. A small flexible wire, *f*, is placed in the open fold, and the fold, with the wire in, is then passed through a seaming-machine, which closes the fold closely and tightly around the wire. The wire is then withdrawn by drawing it upward, which uncloses or opens the seam, leaving a narrow but regular groove for the insertion of the wire-cloth *g*, forming the bottom of the sifter. This wire-cloth is formed with a downwardly-projecting flange, *g'*, which is inserted in the groove of the fold just described. When this is done the folded edge of the sifter, with the wire-cloth inserted, is run through a crimping-machine designed expressly for the purpose, which produces successive crimps or corrugations *h* in the edge of the sifter, all the way around, as shown in the bottom view, Fig. 4. The crimps are of considerable length to cover the whole width of the flange of the wire-cloth, and also to give an inward bevel or incline to the edge of the sifter, as shown in Fig. 1.

By the means above described a firm fastening of the wire-cloth to the sifter is made, the crimps so bending and corrugating the wire, with the edges of the hoop, that it cannot possibly escape. The mere closing of the fold upon the wire without crimping would be insufficient, as the heavy weight of the coal upon

the wire would cause it to pull out of the fold. Another important advantage is that the crimping is carried high enough on the hoop to produce considerable bevel, by which the sifter
5 will readily enter the top of the pail without binding. The corrugating also greatly stiffens the bottom of the sifter.

The use of the flexible wire *f* is essential, as without its use the fold *d* cannot be produced
10 in proper form to receive the flange of the wire-cloth.

I am aware that sifters or screens have before been made by placing a wire bottom within a hoop or band, and beading or corrugating
15 the same to secure it in place; but in such case circumferential and not vertical corrugations have been used, and a single bead only has been used, in which case a bevel cannot be given to the sifter to adapt it to enter a pail.
20 Such I do not claim.

I claim—

1. In an ash-sifter, the sifter B, constructed at its bottom with the fold *d*, receiving and embracing the flange *g'* of the wire bottom *g*,
25 and provided with a series of vertical corruga-

tions or crimps, *h h*, extending around the whole sifter, securing the wire bottom in place and producing a bevel on the hoop to facilitate its insertion in a pail, as shown and described.

2. The method or process herein described
30 of forming sifters, which consists in first forming a fold at the bottom of the hoop or frame of the sifter, then inserting a flexible wire in the groove of the fold and closing the fold closely around the wire, then drawing the wire
35 outward and upward to open the groove, then inserting the right-angled flange of the sifter, bottom in the groove, and finally crimping or corrugating the folded edge vertically all around the hoop to fasten the wire and to bevel
40 the lower edge of the hoop to facilitate its insertion in a pail, as herein shown and described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

EDWARD P. FOLLETT.

Witnesses:

R. F. OSGOOD,
A. I. HULETT.