

(Model.)

T. J. BLAKE.

GRAIN SCOOP.

No. 255,483.

Patented Mar. 28, 1882.

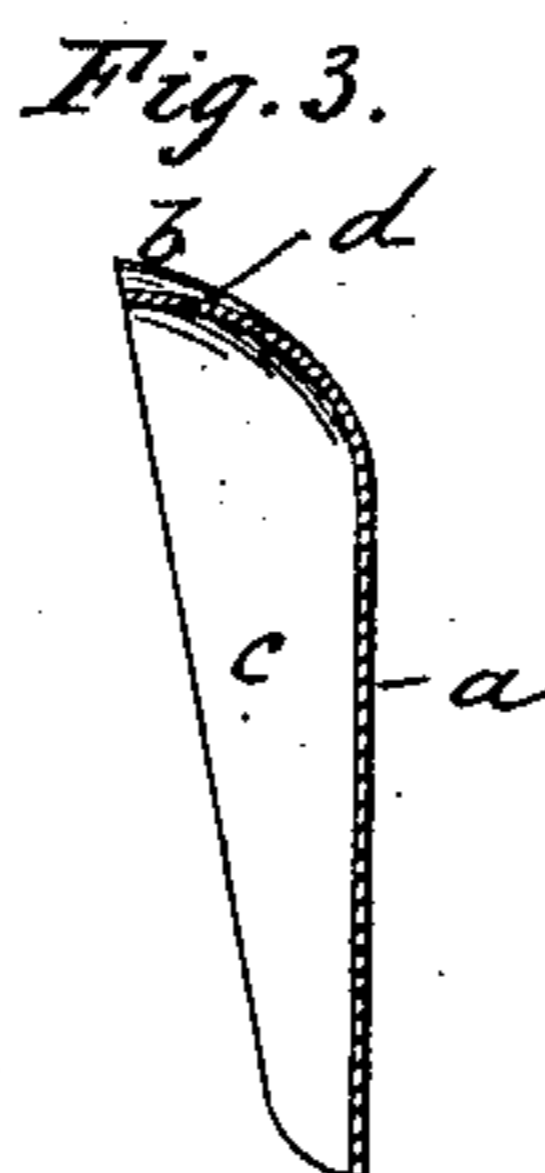
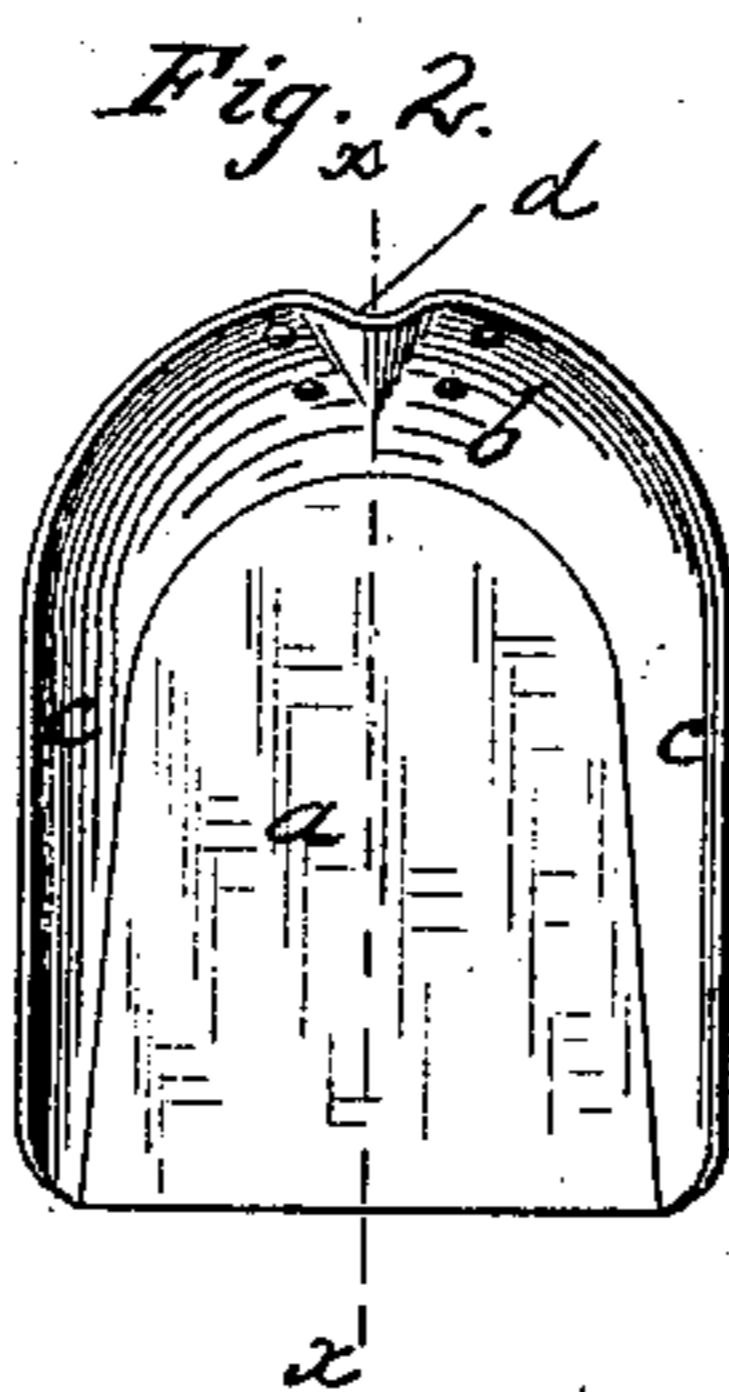
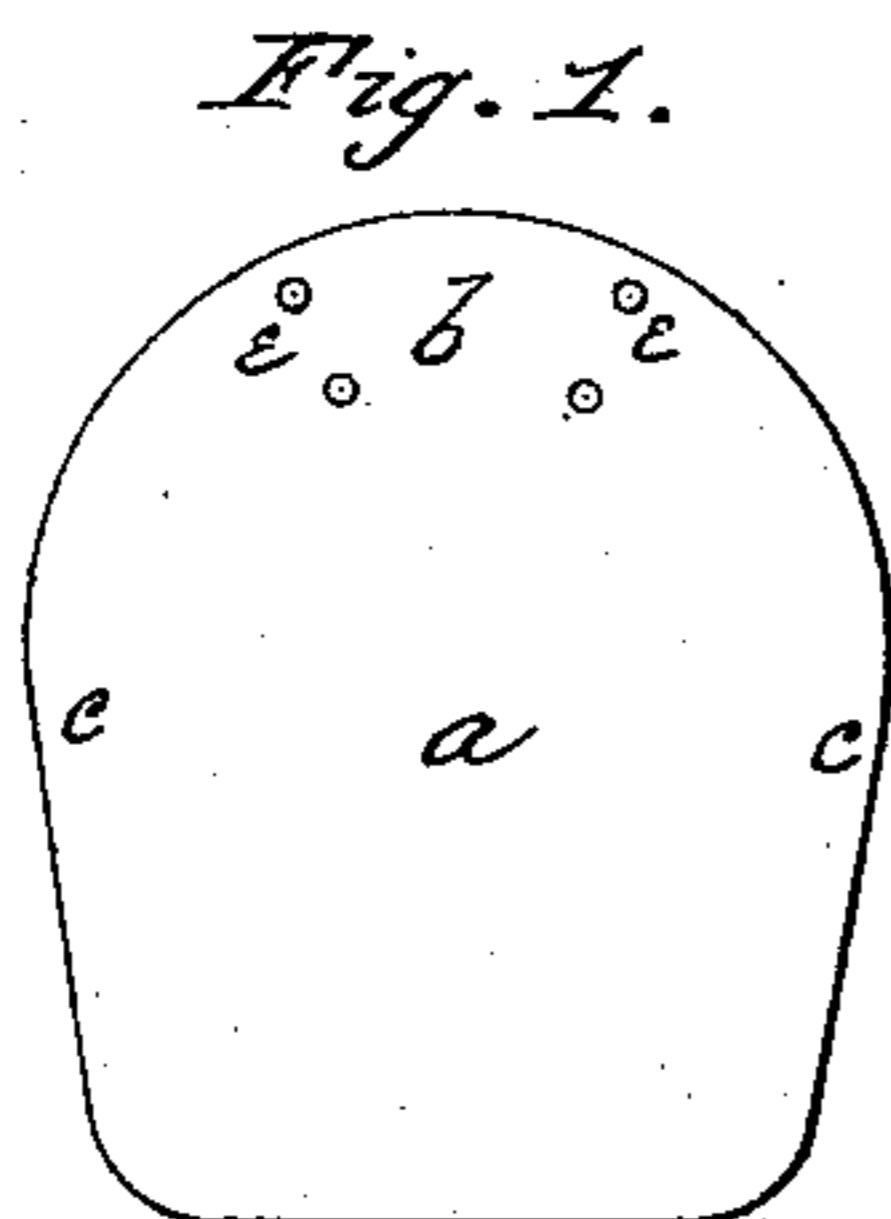


Fig. 4.

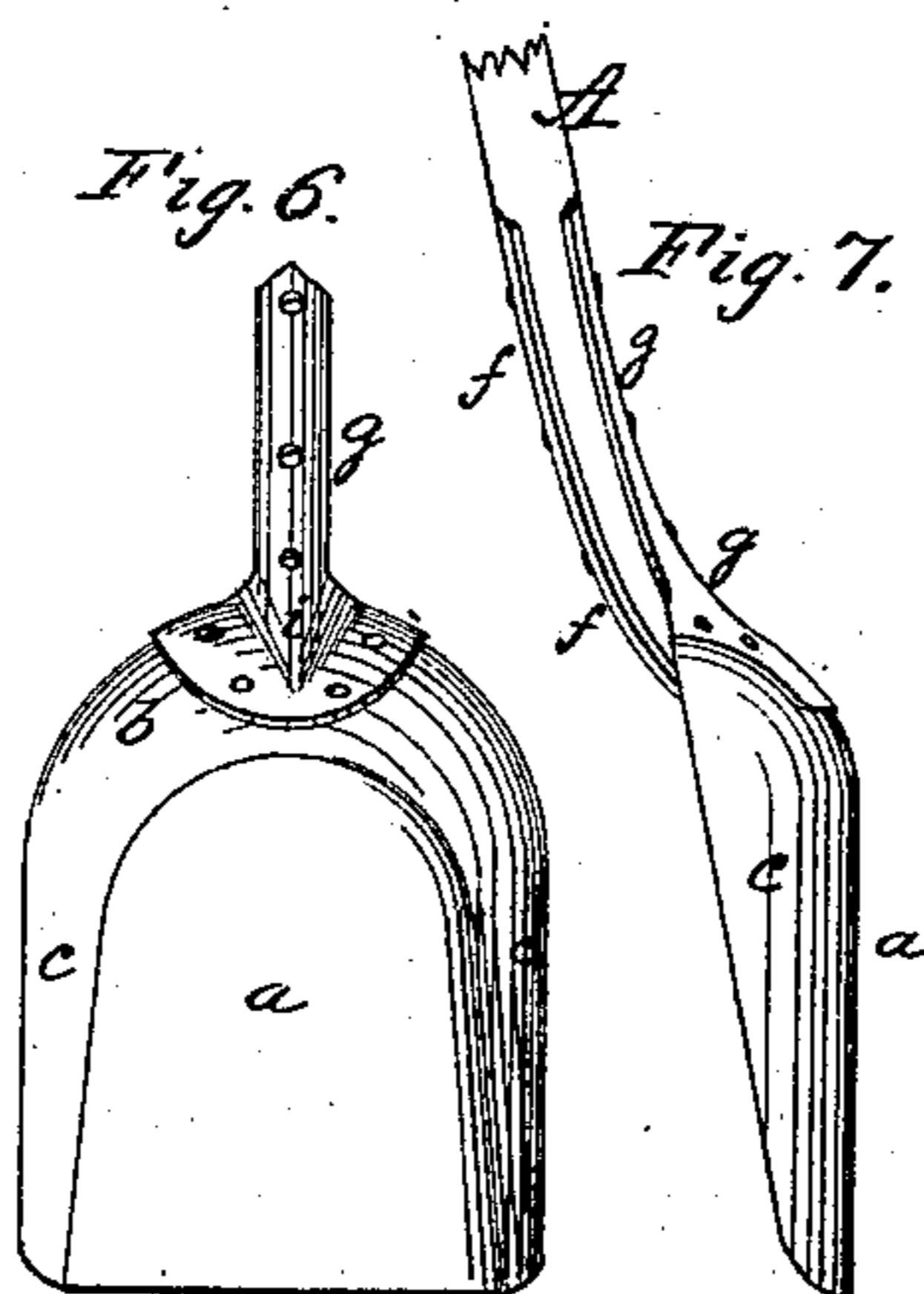
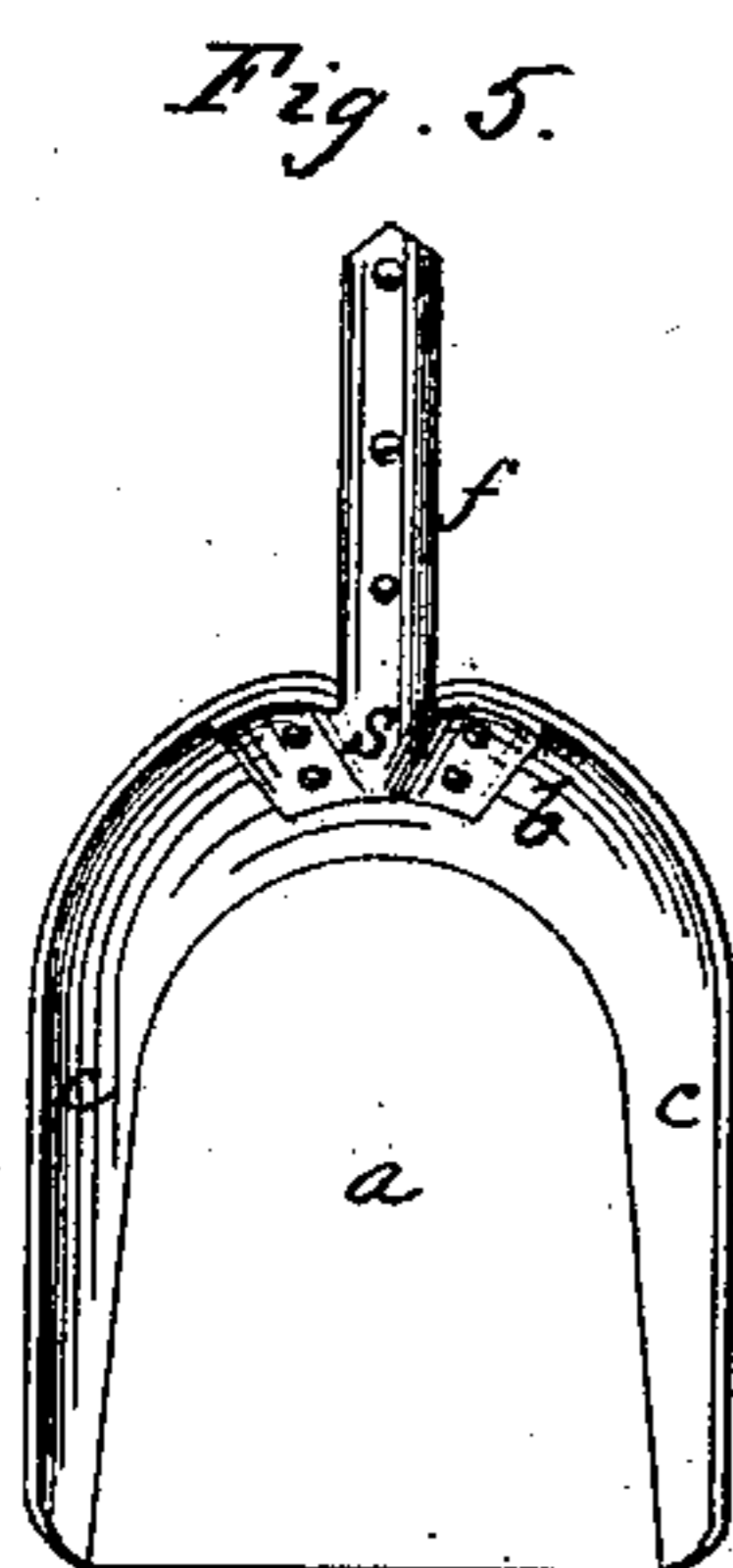
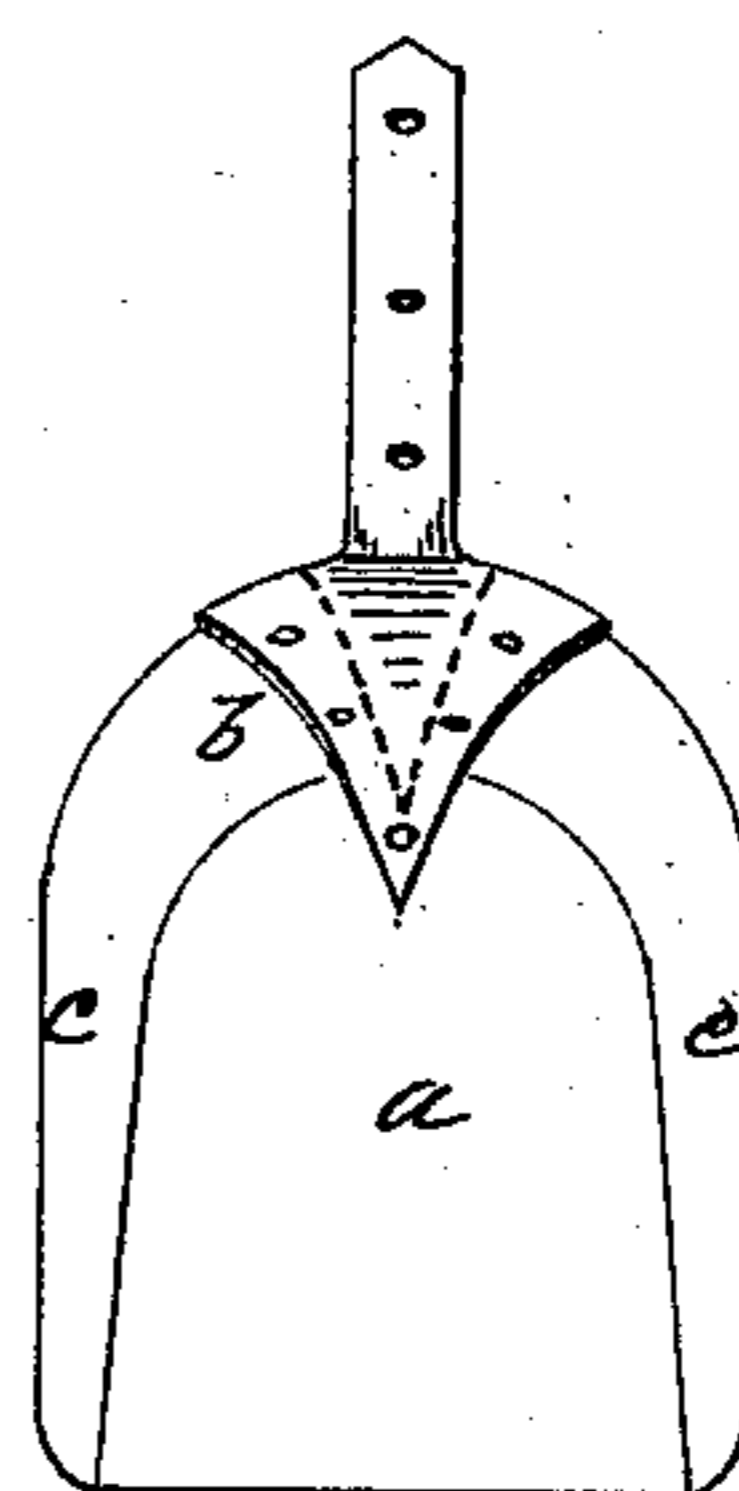
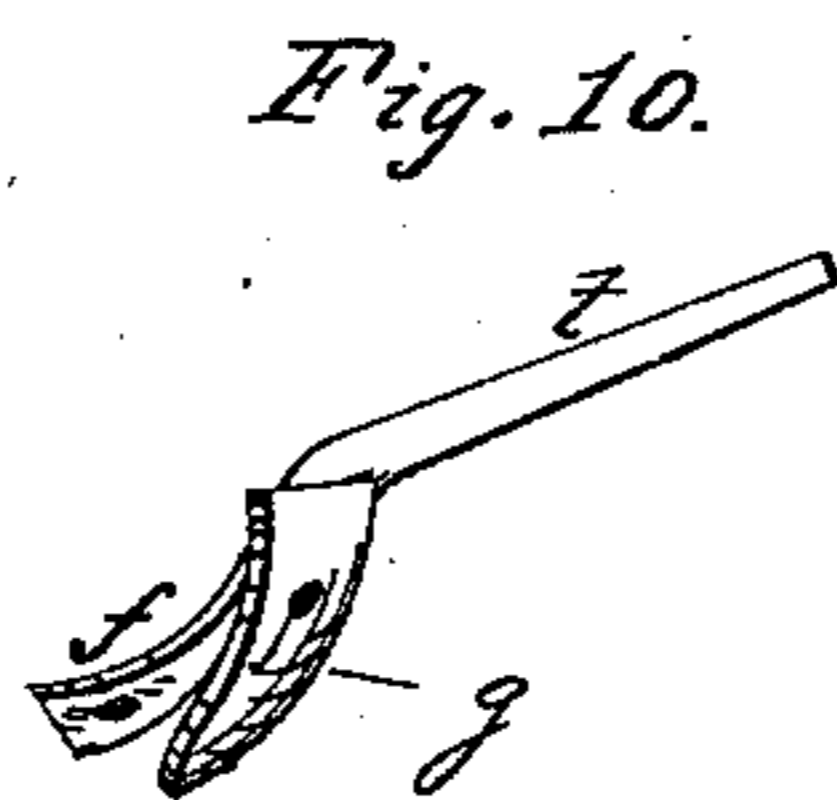
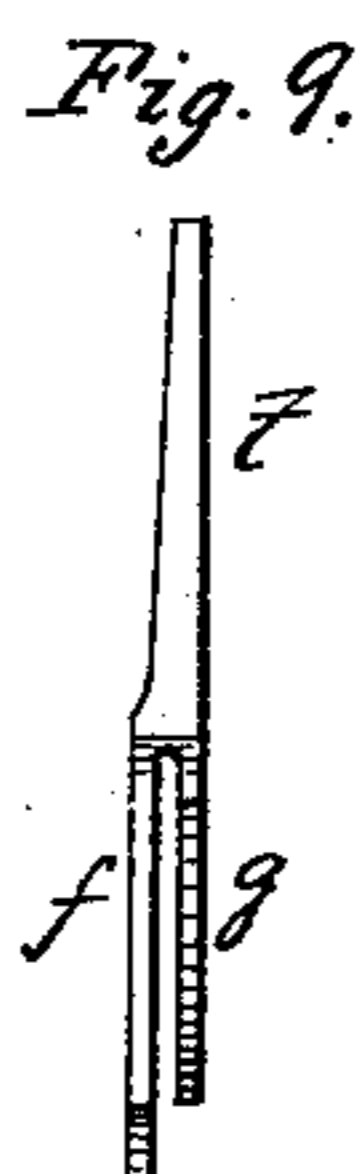
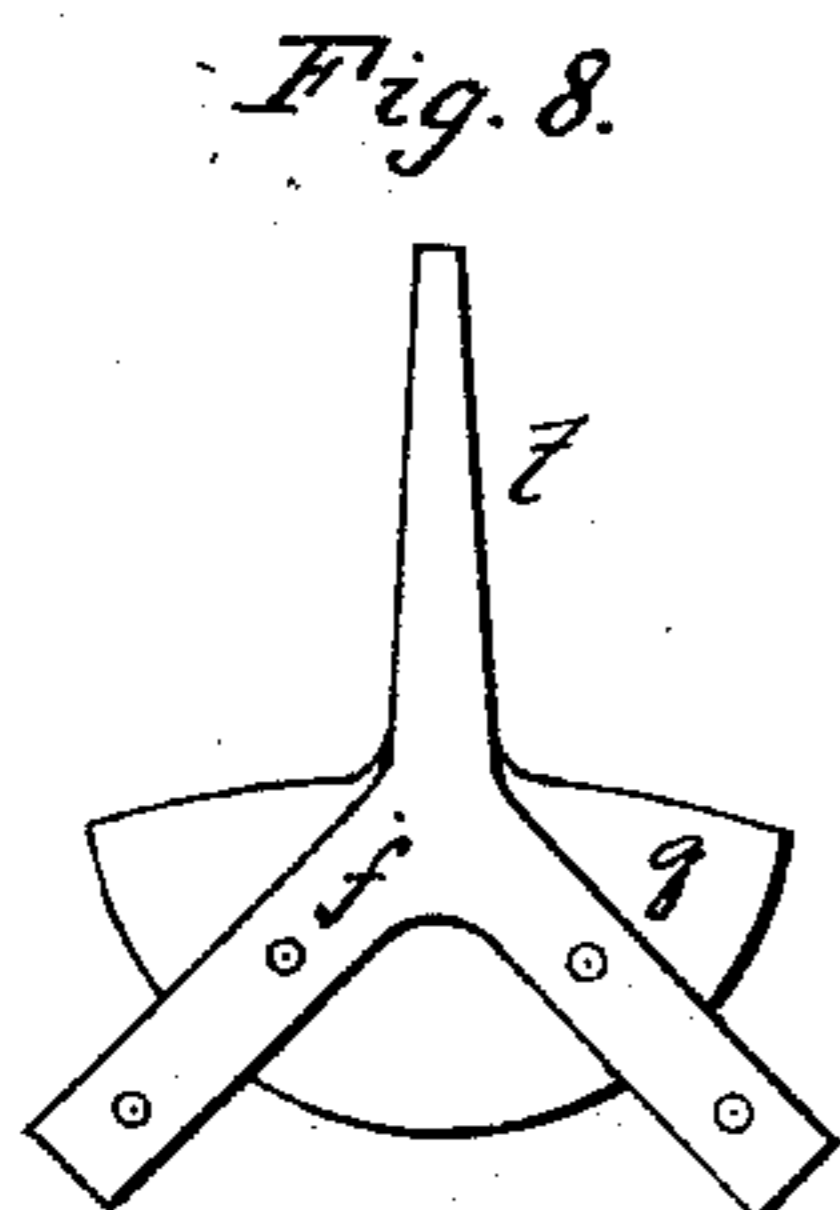
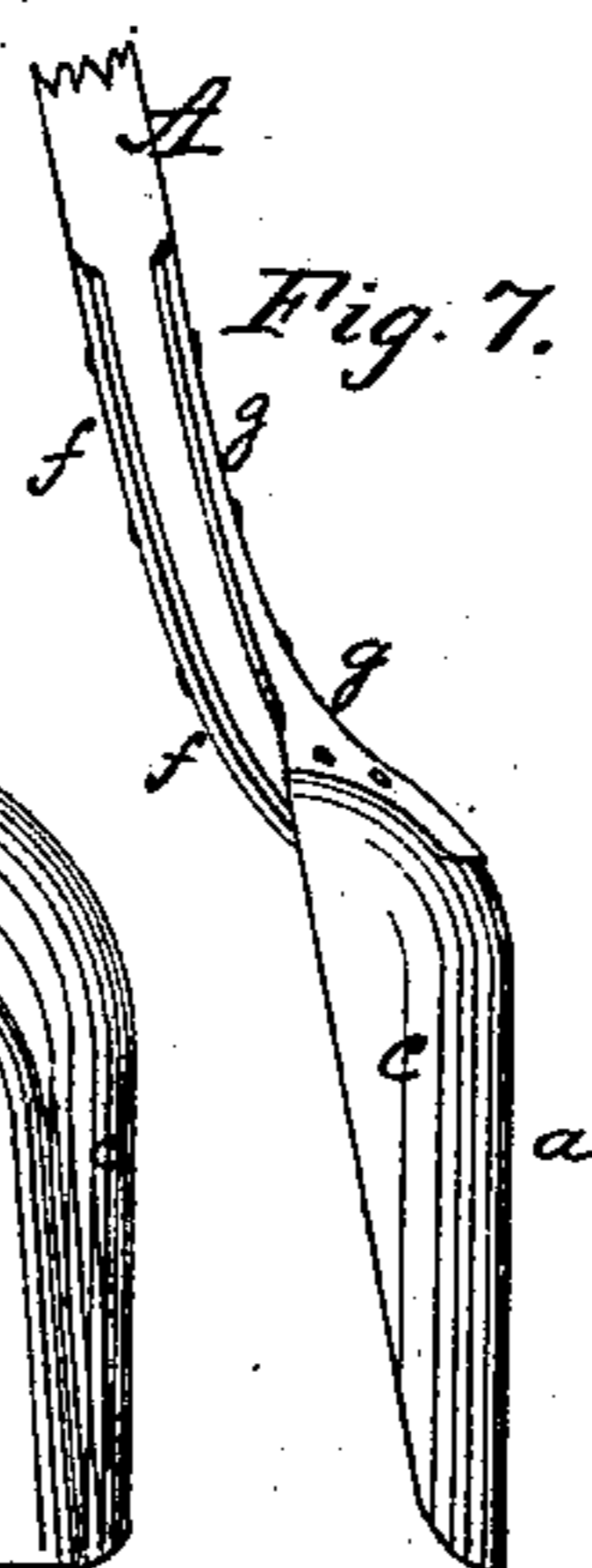


Fig. 7.



WITNESSES:

Jos. B. Connolly
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UNITED STATES PATENT OFFICE.

THOMAS J. BLAKE, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-
HALF TO JOHN RATH, OF SAME PLACE.

GRAIN-SCOOP.

SPECIFICATION forming part of Letters Patent No. 255,483, dated March 28, 1882.

Application filed September 27, 1881. (Model.)

To all whom it may concern:

Be it known that I, THOMAS J. BLAKE, of
Pittsburg, in the county of Allegheny and State
of Pennsylvania, have invented certain new and
5 useful Improvements in Grain-Scoops; and I
do hereby declare that the following is a full,
clear, and exact description of the invention,
which will enable others skilled in the art to
which it appertains to make and use the same,
10 reference being had to the accompanying draw-
ings, which form a part of this specification, in
which—

Figure 1 is a plan of the blank blade. Fig.
2 is a front view of the blank after pressing
15 and crimping. Fig. 3 is a section, *x x*, of Fig.
2. Fig. 4 is a back view of a scoop made ac-
cording to the old form. Fig. 5 is a front view
of my improved scoop with front strap in po-
sition. Fig. 6 is a back view with back strap
20 in position. Fig. 7 is a side view of the com-
plete scoop. Fig. 8 is a front view, showing
modified straps in one piece with the tang.
Fig. 9 is an edge view, and Fig. 10 a side view,
of same bent to shape.

25 This invention relates to what are commonly
known as "grain-scoops." These are at pres-
ent constructed in various ways. One way is
to take a blank of about the form shown at Fig.
1 and cut out a triangular piece, which leaves
30 a gap extending into the blade *a* through the
back *b*, as shown by dotted lines in Fig. 4.
The straps have triangular enlargements suf-
ficient to cover this gap; but in covering it they
must necessarily extend down over and under
35 the blade, and are secured by rivets, as shown,
one rivet at the point being necessarily on the
bottom or blade. Such a scoop rapidly wears
out from the grinding friction of the bottom
strap and rivet on the floor or ground. An-
40 other way is to cast a special ingot, which is
rolled out in such manner that the straps and
blade are integral and rivets dispensed with.
This process is costly in requiring an extensive
plant of machinery to be erected for it. An-
45 other way is to crimp up the back without cut-
ting, thereby corrugating the back into a sort
of socket for the handle.

My invention is different, and consists in the
hereinafter-described construction, whereby I
50 avoid cutting into the blade, and avoid the con-

sequent necessity of extending the straps onto
the blade to cover the gap, and avoid the blade
rivet or rivets.

I take a blank of any suitable shape, such
as shown in Fig. 1 or that used in Fig. 4, ex- 55
cept that the gap does not extend onto the
blade *a*, and bend it up so as to form the blade
a, sides *c*, and back *b* by any of the well-known
means. Holes *e* are punched in the back *b*, as
shown. The straps are made of sheet metal, 60
preferably. The front strap, *f*, widens out where
it meets the back *b* of the scoop, spreading in
both directions laterally, so as to cover a por-
tion of the back *b*, as in Figs. 5 and 8, and is
bent so as to fit the concavity of the front face 65
of the back *b*, the wide portion of the strap *f*
being convexed at *s* in the middle to help form
a socket for the handle and strengthen the
whole for lifting. The back strap, *g*, is also 70
formed to widen out and fit the back *b*, but at
the part facing the convex or corrugation *s* of
strap *f* is oppositely curved, as at *i*, Fig. 6, so
that the recess between *s* and *i* will form a
socket for the handle, diminishing to nothing
75 at the lower end, and terminating, as do both
straps, at a point on the back *b* above its junc-
tion with the blade *a*. Rivets are then set in
the holes and headed up. Then the handle *A*
is set in and attached in the usual way.

Such a scoop has several advantages. The 80
back strap does not project onto the blade
underneath, nor pass beyond the junction of
blade and back. Consequently, no matter how
the scoop is tilted while in use or brought into
contact with the floor or ground, there is no 85
possibility of the rivets or back strap wearing
out from friction. The combination of the
curves *i* and *s* in the straps and their curved
fitting to the back *b* renders the scoop stiff and
strong. 90

For tang-scoops I weld the straps *f* and *g* to
the form shown at Figs. 8 and 9; but a more
convenient way is to cast them complete in
malleable iron, place a sheet of metal between
the straps *f* and *g*, and press or hammer to the 95
form shown at Fig. 10, and then remove the
sheet of metal. This produces the same for-
mation as if the straps were separately shaped
and welded to form the tang.

I do not claim any particular way of form- 100

ing the blade, as my invention is to the combination of straps shown with the blade and handle.

What I do claim is—

5 In a grain-scoop, the combination of a blade, *a*, having the high curved back *b*, front strap, *f*, corrugated at *s* and extended laterally to fit the curvature of back *b*, back strap, *g*, corrugated at *i*, fitting the back *b* laterally, and extending
10 only to a point on the back *b* above its junction with blade *a*, said straps *f* and *g* being se-

cured to the scoop by rivets passing through them and the back *b*, and a handle, *A*, attached to the said straps, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THOMAS J. BLAKE.

Witnesses:

T. J. MCTIGHE,

THOMAS J. PATTERSON.

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