

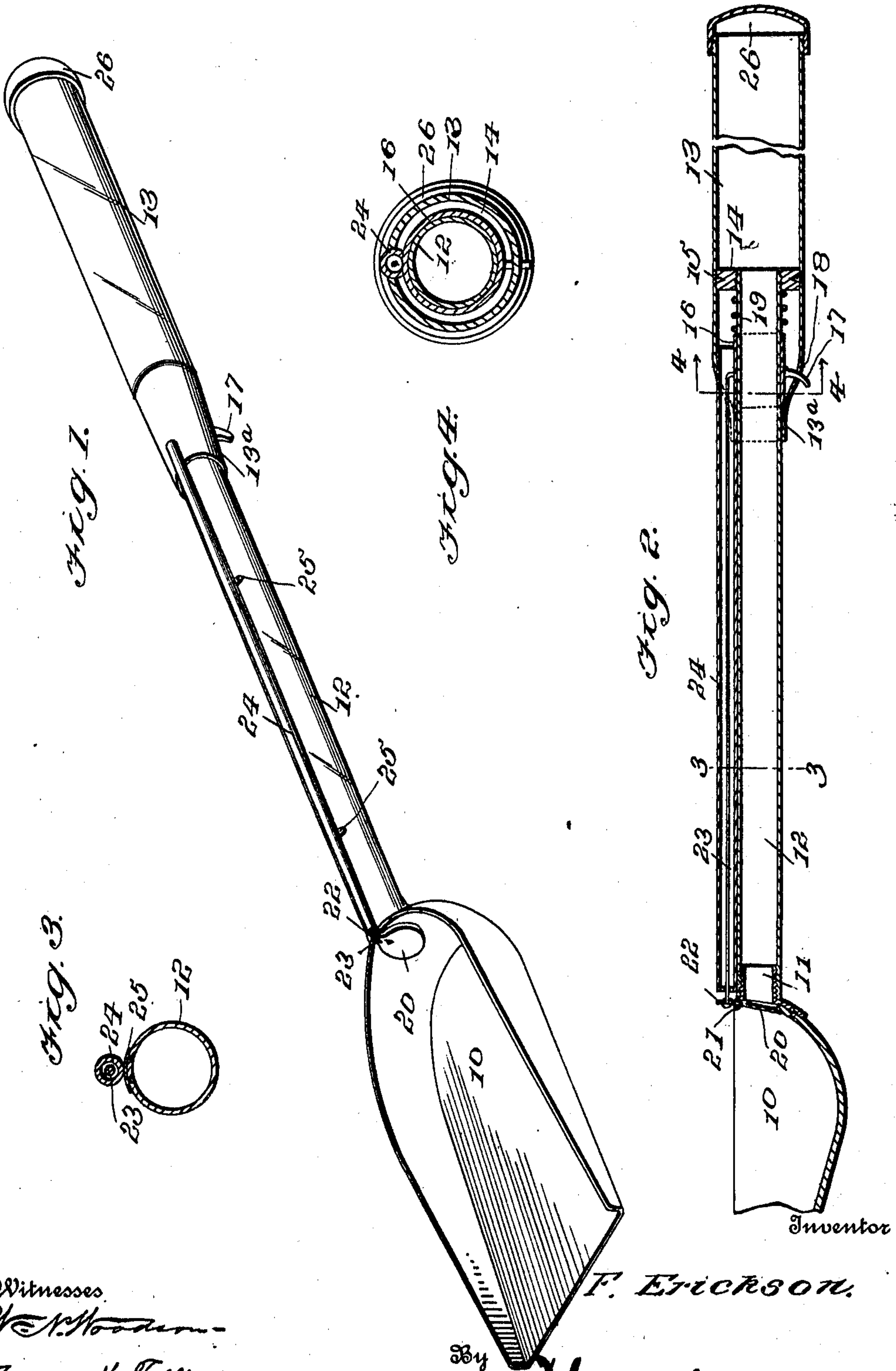
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SHOVEL.

APPLICATION FILED JAN. 24, 1911.

993,668.

Patented May 30, 1911.



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UNITED STATES PATENT OFFICE.

FREDERICK ERICKSON, OF LINDSBORG, KANSAS.

SHOVEL.

993,668.

Specification of Letters Patent.

Patented May 30, 1911.

Application filed January 24, 1911. Serial No. 604,449.

To all whom it may concern:

Be it known that I, FREDERICK ERICKSON, citizen of the United States, residing at Lindsborg, in the county of McPherson and State of Kansas, have invented certain new and useful Improvements in Shovels, of which the following is a specification.

This invention relates to shovels, and has for an object to provide a magazine shovel wherein a quantity of material may be carried and fed, at the will of the operator, into the bowl or body of the shovel to be deposited as desired.

The invention has for another object to provide a shovel for use in burial ceremonies which is made relatively small and light, and which is adapted to carry a quantity of sand or fine earth and keep the same dry so that the operator will not become soiled, particularly in damp weather.

The invention further contemplates a shovel of this character which may be made of any adaptable design and of a size and weight to admit of its being easily carried.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of the improved shovel; Fig. 2 is a longitudinal central section through the same; Fig. 3 is a transverse section on the line 3—3 of Fig. 2 in the direction of the arrows shown. Fig. 4 is an enlarged transverse section on the line 4—4 of Fig. 2.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing by the same reference characters.

Referring to the drawing the reference numeral 10 designates a bowl or body of the shovel which is of any approved form, the drawing disclosing the same as composed of a relatively flat bottom having an upstanding curved flange at its rear end tapering and merging in the forward sides of the bottom. The rear end of the bowl 10 carries a hollow socket 11 in the form of a sleeve which is externally threaded for engagement into the lower internally threaded end of a tube 12. The tube 12 comprises the lower section or portion of the handle of the shovel and fits into the lower end of the upper hand section 13 of the shovel. The

hand section 13 is reduced at its lower end to provide a collar 13^a which is offset toward the upper side of the handle 13 to snugly receive the upper end of the tube 12. An annulus 14 is disposed in threaded relation about the upper extremity of the tube 12 and fits snugly within the handle 13, the annulus being held fixedly therein by screws 15 passing through the sides of the handle 13 into the annulus 14. A sliding sleeve 16 is carried about the upper end of the tube 12 within the lower end of the handle 13 and carries a depending trigger 17 projecting through a slot 18 in the lower side of the handle 13. The slot 18 is of a predetermined length to admit of a limited longitudinal movement of the sleeve 16. A helical spring 19 is disposed about the tube 12 between the annulus 14 and the upper end of the sliding sleeve 16 to move the sleeve 16 down and hold the trigger 17 against the lower marginal edge of the slot 18.

The opening communicating the shank 11 with the interior of the bowl 10 is normally closed by a flap valve 20 hinged upon a transverse pintle 21 at its upper end, the pintle being carried by the upstanding flange of the bowl, and is provided with an upstanding ear 22 to which is loosely connected the lower extremity of an operating rod 23 passing up outside of the tube 12 and having permanent attachment upon the upper side of the sleeve 16. A housing 24 incases the rod 23, and is of cylindrical form, the same being attached to the tube 12 by straps 25 engaging against the under side of the casing 24 and being riveted to the tube 12. The upper end of the casing 24 passes into the lower end of the handle 13 and is cut away in its lower side to admit of the passage of the rod 23 down to the sleeve 16. The upper end of the handle 13 is closed by a threaded cap 26 adapted to be removed from the handle in placing material therein which is fed through the tube 12 into the bowl 10.

In operation, a quantity of material such as sand or fine earth is placed in the handle 13 by removing the cap 26. The material falls down through the handle 13 into the tube 12 and against the upper side of the flap valve 20. The operator grasps the shovel by the handle 13, and when it is desired to deposit a quantity of the material in the bowl 10, the trigger 17 is drawn up within the slot 18 to slide the sleeve over the tube 12 and against the tension of the spring

19. The sleeve draws the rod 23 up there-
with and swings the lower end of the flap
valve 20 away from the shank 11, admitting
the material into the bowl 10. The slot 18
5 is of such length that the flap valve 20 can
be opened only a short distance so as to ad-
mit of a small quantity of the material into
the bowl 10 at one time.

10 This improved shovel may be made in
any fanciful design, and in any size con-
venient so that the shovel may be carried or
stored in a convenient place. This struc-
ture admits of a shovel which is light in
weight and compact and simple in form,
15 producing a practical and efficient device.

It is of course understood that a shovel of
this construction may be utilized for various
purposes other than herein set forth, as for
instance, the tube 12 and the handle 13 may
20 be of a predetermined size so as to con-
tain a certain quantity of material through
which the same may be passed to be meas-
ured.

25 Having thus described the invention, what
is claimed is:

1. A shovel including a bowl, an upwardly
extending tube carried at the rear end of the
bowl, a handle fitting over the upper end
of the tube, a sleeve engaging about the tube
30 within the handle, a valve rod passing down
from the sleeve in parallelism with the tube,
a valve carried in the bowl for closing the
lower end of the tube, a spring disposed in
the handle and engaging against the sleeve
35 for normally closing the valve, and a trig-
ger depending from the sleeve through the
handle for opening the valve.

40 2. A shovel including a bowl, a tube ex-
tending up from the inner end of the bowl
and communicating therewith, a handle car-

ried upon the upper end of the tube, an an-
nulus fitted about the upper extremity of
the tube and engaging snugly in the handle,
a sleeve slidable upon the tube, a spring in-
terposed between the annulus and the sleeve 45
for normally holding the latter down, a cas-
ing carried against the upper side of the
tube, an operating rod arranged in the cas-
ing and having connection at its upper end
to the sleeve, a flap valve hinged in the bowl 50
for closing the lower end of the tube and
having connection with the lower end of the
rod, and a trigger carried upon the sleeve
and depending through the handle.

3. A shovel including a bowl, a magazine 55
handle attached to the bowl and communi-
cating therewith, a valve carried upon the
lower end of the handle for controlling the
passage of material from the handle to the
bowl, and operating means projecting 60
through the under side of the handle and
at its upper end and having connection with
the valve to open the same.

4. A shovel including a bowl, a magazine 65
handle attached to and communicating with
the bowl, a valve carried upon the lower end
of the handle opening communication with
the bowl, valve operating means carried in
the upper end of the handle and having con-
nection with the valve, and a trigger de- 70
pending through the upper end of the han-
dle from the valve operating means and
adapted for sliding movement to open the
valve.

In testimony whereof, I affix my signature 75
in presence of two witnesses.

FREDERICK ERICKSON. [L. s.]

Witnesses:

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