

*P. Traxler,
Stump Elevator.*

No 17,528,

Patented June 9, 1857.

Fig: 2

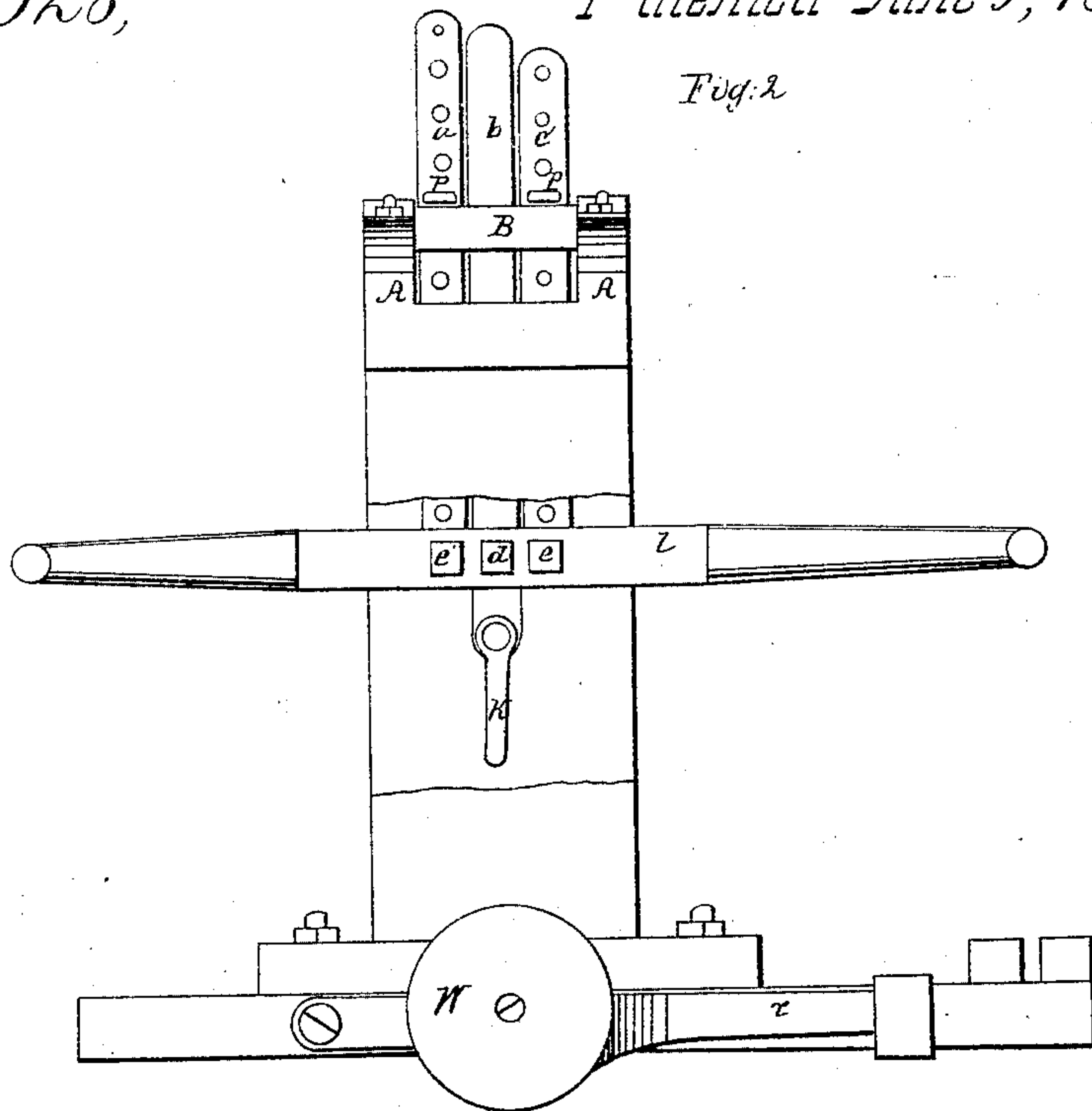
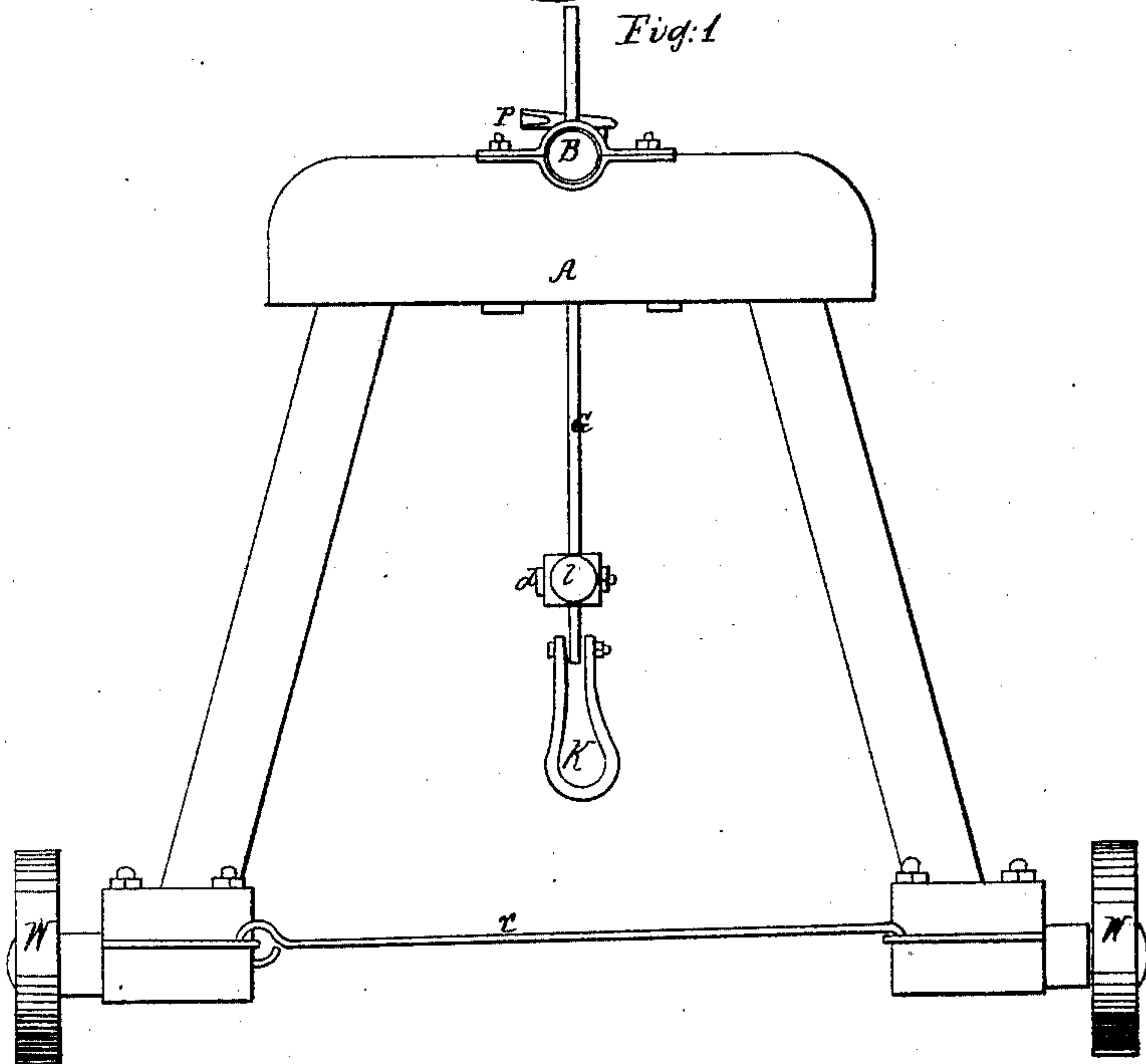


Fig: 1



UNITED STATES PATENT OFFICE.

PETER TRAXLER, OF SCOTTSBURG, NEW YORK.

STUMP-EXTRACTOR.

Specification of Letters Patent No. 17,528, dated June 9, 1857.

To all whom it may concern:

Be it known that I, PETER TRAXLER, of
Scottsburg, in the county of Livingston and
State of New York, have made and invented
5 certain new and useful Improvements in
Machines for Pulling Stumps of Trees and
Similar Purposes; and I do hereby declare
the following to be a full and accurate de-
scription thereof, reference being had to
10 the accompanying drawings and to the let-
ters of reference marked thereon, same let-
ters referring to like parts in both figures.

It will be observed in said drawings that
my machine consists primarily of a stout
15 frame across the top of which passes the two
beams A A. These beams contain boxes
in which the beam B is free to revolve.
Through B a long and narrow slot is cut
through which pass the three bars *a*, *b*, *c*.
20 The bars *a* and *c* are pierced with holes
as seen in the drawing and are supported
by the pins P, P, passing through them and
resting upon the beam B. The bar *b* is
supported at its lower extremity by the pin
25 *d* which passes through it and the lever
l—said lever being in turn supported by
the pins *e* *e'* passing through it and the bars
c and *a*.

The whole machine moves on the wheels
30 W W which may be raised and lowered in
a well-known manner.

In moving the machine over a stump the
bar *r* is raised and is let down after the
machine is in place; and serves to hold the
35 machine firm.

The machine is moved from place to place
by any suitable locomotive power—a horse
being generally used.

Having fixed the clamps or dogs, at-
40 tached to a proper chain connected to K,
to the stump the operation of raising it is
as follows: One end of the lever *l* being de-
pressed, the other being lifted at the same
time the pin passing through the vertical
45 bar nearest the descending end of the lever
will become the fulcrum and the bar *b* will
be raised with a force proportionate to the
force applied to the ends of the lever mul-
tiplied severally by the number of times
50 the short end of said lever is contained in
the long one. Thus if 150 lbs. be exerted at
each end of the lever (that at the right
hand side (Fig. 2) descending and that at
the left ascending) the force applied at the
55 right hand end will tend to raise the

bar *b* with a force equal to 150 lbs. multi-
plied by the number of times the space *d e*
is contained in the space between *e* and the
end of the lever. And the ascending force
applied at the left hand end will tend to 60
raise the bar *b* with a force equal to 150
lbs. multiplied by the number of times the
space *d e* is contained in the space between
d and the end of the lever—which as will
be seen is a little greater than the force ex- 65
erted by the descending power—*d* being the
center of the lever. Thus both ends of the
lever are effective—the greatest leverage be-
ing given however to the most effective
power viz. the lifting force. When the bar 70
b has been elevated as much as possible by
one movement of the lever it will be evi-
dent that the bar *a* or *c* will have been also
raised through the slot in the beam B so as
to bring a lower pin-hole above said beam. 75
A pin being put through this hole will pre-
vent the bar from descending on the motion
of the lever being reversed. I prefer pins to
a pawl or ratchet as they allow greater
freedom of motion on the part of the bars 80
a *b*, and *c* which is a very essential point in
this machine, as, although it is always best
to have the machine as nearly as possible
over the center of the stump to be pulled
yet stumps do not always come out straight. 85
Hence the necessity for freedom of motion
in every lateral direction which is afforded
by the combination of the three bars hung
as described on the revolving beam B. And
it is in the peculiar arrangement of parts 90
securing this that the nature of my inven-
tion consists as is more definitely expressed
in the following.

Having thus described my invention what
I claim therein as new and desire to secure 95
by Letters Patent is—

The combination of the three bars *a*, *b*, *c*
with the slotted beam B, and lever *l*, said
beam B being free to revolve in the manner
described. 100

I am aware of the construction of the
lever of Sagaronsse and several modifica-
tions thereof and do not claim the recipro-
cating lever thus used but simply my com-
bination substantially as above set forth.

PETER TRAXLER.

Witnesses:

CHAS. W. LITTLE, Sr.,
H. M. PHIN.