A. DUNNEBACHE & J. LINDEN.

STUMP-ELEVATOR.

No. 192,421. Patented June 26, 1877.

Fig. 1.

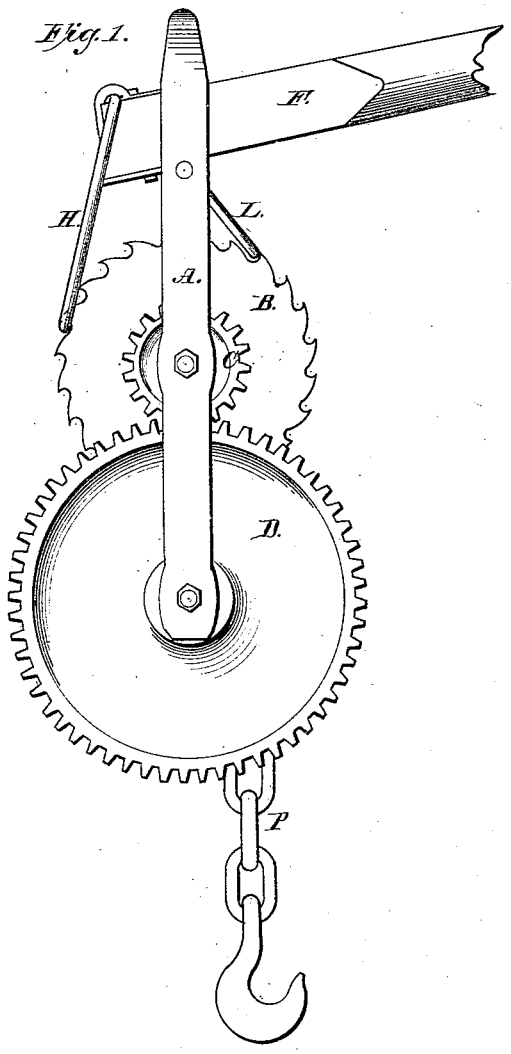
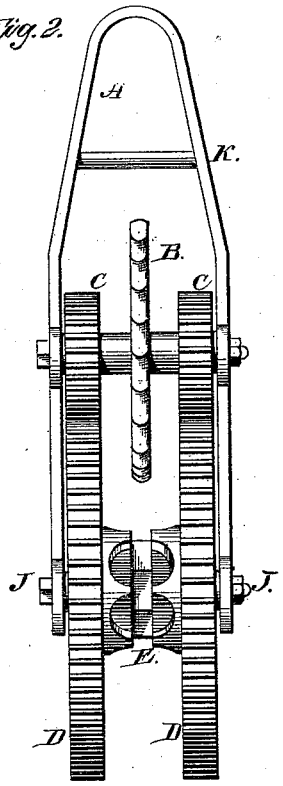


Fig. 2.



Witnesses:
A. P. Carpenter
G. W. Harrison

Inventors:
August Dunnebache.
Jacob Linden

UNITED STATES PATENT OFFICE.

AUGUST DUNNEBACHE AND JACOB LINDEN, OF LANSING, MICHIGAN.

IMPROVEMENT IN STUMP-ELEVATORS.

Specification forming part of Letters Patent No. **192,421**, dated June 26, 1877; application filed April 16, 1877.

To all whom it may concern:

Be it known that we, AUGUST DUNNEBACHE and JACOB LINDEN, both of Lansing, in the county of Ingham and State of Michigan, have invented a new and useful Improvement in Stump-Pulling and Stone-Lifting Machines, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of our invention is to construct a cheap, compact, and powerful lifting-machine by the combination of gears D D, with the sprocket-wheel E attached, pinions C C, with ratchet-wheel B, lever F, link H, ratchet L, and chain P, all combined within a suspended yoke, A, as shown in the plain side view, Figure 1, and the front view, Fig. 2, of the accompanying drawings.

To explain more fully, A is a yoke, which may be suspended in any suitable frame. There is a shaft through the lower end of the yoke at J, upon which revolve the spur-wheels D D and sprocket E, they being cast solid together, and are therefore, in reality, but one wheel in effect. Above this, and through the yoke at I, is another shaft, upon which revolve the pinions C C and ratchet-wheels B, and they also are cast solid together with the same hub, revolving together as one wheel. K is a bolt through the yoke, which serves as a fulcrum for the lever F. H is a link attached to the short arm of the lever, and acts upon the teeth of the ratchet-wheel.

The chain P being attached to the stump or load, and passed over the sprocket-wheel, which is so constructed with spurs as to engage firmly with the links. By the action of the lever F and link H the ratchet-wheel B and pinions C C are revolved, they, in turn, revolving the spurs D D and sprocket E, thereby raising the load.

Having gearing on each side of E and B prevents that twisting of the yoke which was the result when having a spur and pinion only on one side.

Having fully explained the above, and being aware there is nothing new in any of the parts, we do not claim them separately; but

What we do claim is—

The combination of gears D D C C with the sprocket E and ratchet B, when made as described, substantially as and for the purpose set forth.

AUGUST DUNNEBACHE.
JACOB LINDEN.

Witnesses:
H. B. CARPENTER,
G. W. HARRISON.