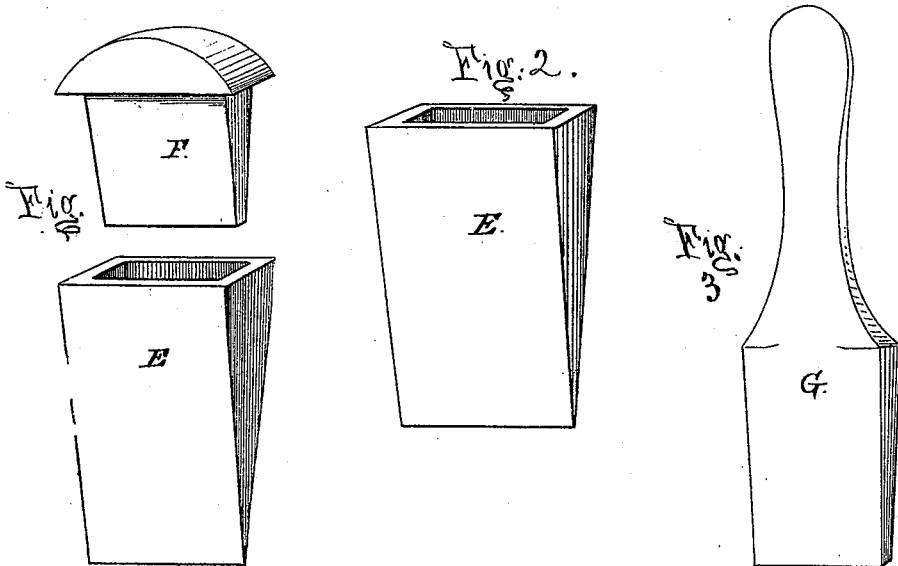


J. KELLY.
METAL WEDGE.

No. 188,376.

Patented March 13, 1877.



Witnesses

William H. Adams

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UNITED STATES PATENT OFFICE.

JAMES KELLY, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO MICHAEL DALTON, OF SAME PLACE.

IMPROVEMENT IN METAL WEDGES.

Specification forming part of Letters Patent No. **188,376**, dated March 13, 1877; application filed February 2, 1877.

To all whom it may concern:

Be it known that I, JAMES KELLY, of San Francisco, in the State of California, have invented an Improvement in Metal Wedges, of which the following is a specification:

My invention relates to a new construction of a wedge adapted to be used in connection with any suitable driver for use in excavating and grading, to break off and remove masses of earth; and it consists in making a hollow wedge, or one with an aperture in its upper end, adapted to receive an iron head to take the blows of the driver, which is capable of being removed after the wedge is driven into the ground and a lever substituted for it, and by the combined action of the lever and the wedge the mass of earth is pried or broken off.

In the accompanying drawing, Figure 1 is a perspective view of the wedge and its removable head. Fig. 2 is a separate perspective view of the wedge, and Fig. 3 a similar view of the lever.

E represents the wedge, constructed preferably of cast metal, and used in connection with any suitable driver for excavating purposes, but more particularly designed to be used with a wedge-driving machine for which

I am about to apply for Letters Patent, and is cast with an opening in its head or broad end, and a wood or iron head, F, with a stem of the same size as the hole, is placed in it to receive the blows of the drop, and to protect the wedge from being battered or injured by the blows. This head F is removed when the wedge is driven into the earth, and a lever or handle, G, made with a broad end to fit the wedge, is employed in operating it to pry and break off the mass of earth in front of the line of wedges; and by the use of these parts the work of grading banks, excavating for buildings, ditching, and similar operations, is done with saving in the time and labor, and with the employment of fewer laborers than in the old method of digging.

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

The cast-metal wedge E, having a hollow end, in combination with the loose head F and loose lever G, substantially as described and shown.

JAMES KELLY. [L. S.]

Witnesses:

SAML. S. MURFEY,
C. W. M. SMITH.