No. 821,215. PATENTED MAY 22, 1906.

J. C. CANTLEBERY & W. J. EDWARDS.

TOOTH FOR STEAM SHOVELS.

APPLICATION FILED JULY 18, 1905.

Fig. 1.

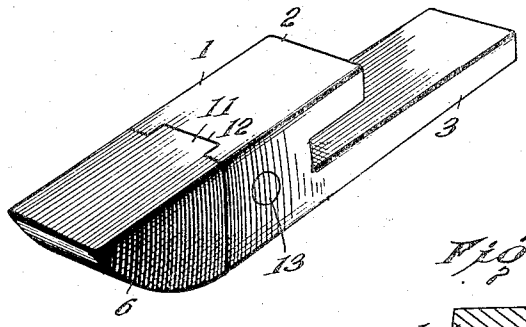


Fig. 3.

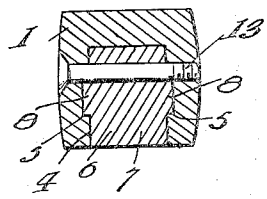


Fig. 2.

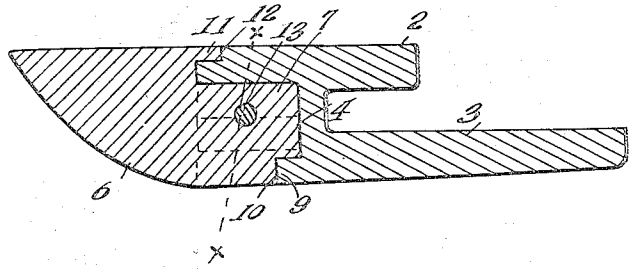
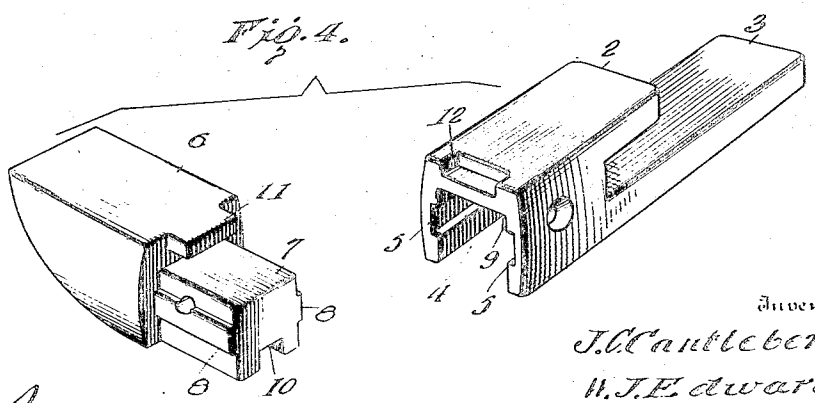


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN C. CANTLEBERY AND WILLIAM J. EDWARDS, OF HILLSVILLE, PENNSYLVANIA.

TOOTH FOR STEAM-SHOVELS.

No. 821,215. Specification of Letters Patent. Patented May 22, 1906.

Application filed July 18, 1905. Serial No. 270,207.

To all whom it may concern:

Be it known that we, JOHN C. CANTLEBERY and WILLIAM J. EDWARDS, citizens of the United States, residing at Hillsville, in the county of Lawrence and State of Pennsylvania, have invented certain new and useful Improvements in Teeth for Steam-Shovels, of which the following is a specification.

This invention relates to steam-shovels, and more particularly to a tooth for same which is provided with a removable point.

In the operation of steam-shovels the teeth very quickly become worn and inefficient in operation, and much delay is commonly occasioned in replacing same.

The object of this invention is to produce a tooth for steam-shovels provided with a removable point which can be very quickly and easily replaced when worn.

With this object in view the invention consists, essentially, of a tooth formed in two sections which are connected by a joint the various parts of which interlock, so as to render it impossible for same to work loose.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is an under side perspective view of a steam-shovel tooth embodying my invention. Fig. 2 is a longitudinal sectional view through the tooth. Fig. 3 is a sectional view on the line X X of Fig. 2. Fig. 4 is a detail perspective view of the parts.

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

The numeral 1 designates the main portion or the base of the tooth, which is provided with arms 2 and 3, by means of which it is adapted to be permanently secured to the shovel. The end of the base 1 is provided with an approximately rectangular recess 4, which extends through to one side of the base. The two opposite sides of this recess 4 are provided with longitudinal grooves 5. The point 6 of the tooth is provided with a tongue 7, which fits into the recess 4, virtually affording a mortise-and-tenon connection, and is formed with ribs 8, which fit into the longitudinal grooves 5. The tongue 7, one side of which is flush with a side of the base, extends into a recess 4. An extension 9 projects forwardly from the base 1 at its upper side and fits into a corresponding notch 10 in the tongue 7, and the point 6 is provided with a similar extension 11, one side of which is flush with the opposite side of the tooth and which fits into a notch 12 in the base 1. The tongue 7 on the point 6 and the opposite sides of the recess 4 are provided with corresponding openings through which a screw 13 or other suitable fastening member is passed. The base 1 may be permanently attached to the shovel, and when the point becomes worn same can be quickly replaced by withdrawing the screw 13 and removing the old point. The ribs 8 on the tongue 7 coöperate with the longitudinal grooves 5 to form a very secure joint, and the extensions 9 and 11 serve the double function of preventing dirt from working into the joint and also of reinforcing same against lateral movement, so that it is practically impossible for the joint to work loose.

Having thus described the invention, what is claimed as new is—

1. A tooth for steam-shovels comprising a body and a removable point, the body being provided with a mortise, a tenon projecting from the point and fitting into the mortise of the body, and interlocking recesses and extensions between the body and point at the upper and lower sides of the tooth.

2. A tooth for steam-shovels comprising a body provided with a mortise, a removable point having a tenon fitting into the mortise of the body, ribs formed longitudinally at opposite sides of the tenon, the mortise having grooves at opposite sides thereof to receive the ribs of the tenon, an extension projecting rearwardly from the point at its upper side, an extension projecting forwardly from the body at its under side, the body and point having recessed portions to receive the respective extensions aforesaid, and a transverse fastening passing through the body and the tenon and securing the same together.

3. A tooth for steam-shovels comprising a body portion adapted to be secured to the shovel, and a removable point for the tooth, said point and body portion being connected by an interlocking mortise and tenon, the

mortise extending through to one side of the tooth and one side of the tenon being flush with a side of the tooth, the sections of the tooth being also provided with an interlocking extension and recess located on the opposite side of the tooth from which the before-mentioned mortise extends.

4. A tooth for steam-shovels comprising a body portion adapted to be secured to the shovel, and a removable point for the tooth, said point and body portion being connected by an interlocking mortise and tenon, the mortise extending through to one side of the tooth and one side of the tenon being flush with a side of the tooth, the opposite sides of the mortise being provided with longitudinal grooves to receive corresponding ribs projecting from the tenon, the sections of the tooth being also provided with an interlocking extension and recess which are located on the opposite side of the tooth from which the before-mentioned mortise extends.

5. A tooth for steam-shovels comprising a body portion adapted to be secured to the shovel, and a removable point for the tooth, said point and body portion being connected by an interlocking mortise and tenon, the mortise extending through to one side of the tooth and one side of the tenon being flush with a side of the tooth, the body of the tooth being also provided with an extension extending into the mortise and fitting into a corresponding recess in the tenon.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN C. CANTLEBERY. [L. S.]
WILLIAM J. EDWARDS. [L. S.]

Witnesses:
E. S. HILL,
R. MCCREARY.