

W. W. JILZ.

Earth-Auger Shaft-Couplings.

No. 146,257.

Patented Jan. 6, 1874.

Fig. 1.

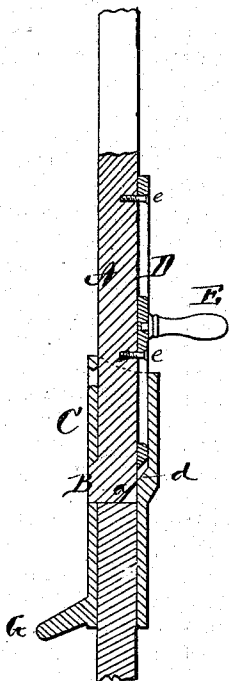
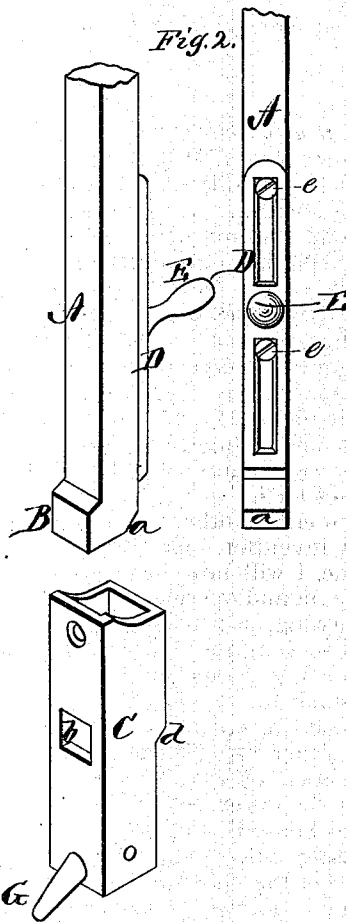


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM W. JILZ, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN EARTH-AUGER-SHAFT COUPLINGS.

Specification forming part of Letters Patent No. **146,257**, dated January 6, 1874; application filed July 17, 1873.

To all whom it may concern:

Be it known that I, WILLIAM W. JILZ, of St. Louis, in the county of St. Louis and in the State of Missouri, have invented certain new and useful Improvements in Coupling for Well-Auger Shafts; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a self-coupler for shafts for well-augers, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal section of my invention, and Fig. 2 shows the parts of the coupling detached.

A represents a square bar, formed on, or welded, or otherwise attached to the lower end of a section of a well-auger shaft. On one side, at the lower end of the bar A, is a projection or hook, B, and the opposite corner *a* on the other side is cut away or beveled, as shown. On the upper end of the adjoining shaft-section is formed or attached a square socket, C, in the front side of which, at the bottom, is an aperture, *b*, large enough to allow the hook or projection B of the bar A to enter the same. In the rear side of the socket C is a beveled offset, *d*, as shown in Fig. 1. D represents a slotted slide, attached to the rear side of the bar A by means of screws *e e* passing through the slots in the slide. This slide,

by its own gravity, falls down as far as the slots in the same will permit. When the upper section is being lowered in order to be coupled, the end of the slide strikes the socket C, and remains stationary until the bar A goes down far enough into the socket to cause the heel *a* to strike the offset *d*. When this occurs, the bar A is thrown over to the front side, and the hook B enters the hole *b*, and thus leaves room for the slide D to fall down into its place of its own accord. It will readily be seen that the shafting cannot become uncoupled unless the shafting is raised far enough to allow the slide to be raised by its handle E. At the lower end of the socket C is a projecting horn, G, to rest on the lever and hold the auger from falling down into the well, while the shafting is being coupled together to go down or uncoupled in coming out of the well.

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

1. The combination of the bar A, having projection B, the socket C, with hole *b* and offset *d*, and the slotted slide D, all constructed and arranged substantially as and for the purposes herein set forth.

2. The horn G, formed on or attached to the part C of the coupling herein described, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of June, 1873.

WILLIAM WHEETEN JILZ.

Witnesses:

C. C. HARTMAN,
EDMUND D. SCHREINER.