

Daniel Moore.
 Imp't. in Ferrules for Pitchforks.

No. 120,763.

Patented Nov. 7, 1871.

Fig. 1.

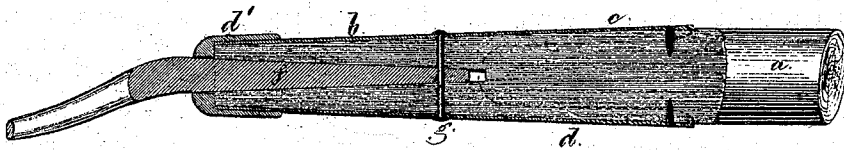


Fig. 4.



Fig. 3.

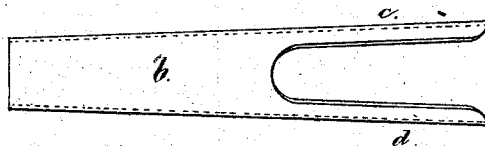
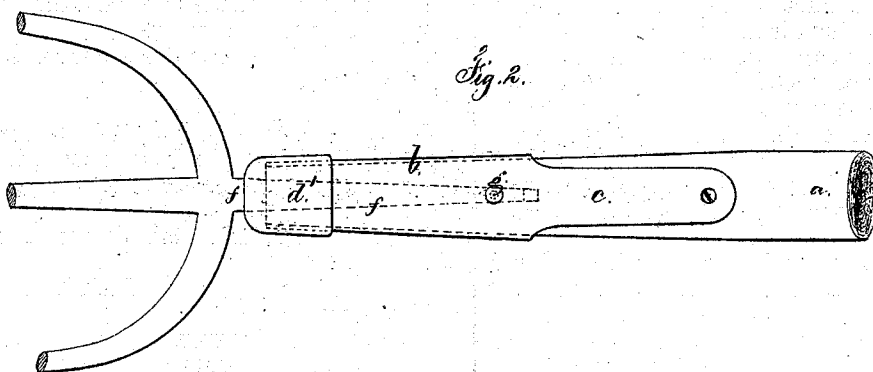


Fig. 2.



Witness

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UNITED STATES PATENT OFFICE.

DANIEL MOORE, OF BROOKLYN, NEW YORK, ASSIGNOR TO EUGENE BISSELL,
OF NEW YORK CITY.

IMPROVEMENT IN FERRULES.

Specification forming part of Letters Patent No. 120,763, dated November 7, 1871; antedated October 23, 1871.

To all whom it may concern:

Be it known that I, DANIEL MOORE, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Ferrules for Pitchforks, &c.; and the following is declared to be a correct description of the same.

Ferrules for hay and manure forks have heretofore been strengthened by placing open rings over the ends, and they have also been cast entire, with the straps and openings at the ends to receive the tang of the fork. These ferrules are necessarily heavy and cumbersome, as the straps could not be cast of the necessary length and sufficiently light.

My invention consists in a cap made of metal, which is placed over the end of the sheet-metal ferrule, and containing a hole to allow the tang of the fork to be entered, and this cap is driven tightly upon the ferrule. By this construction the wood of the handle is protected, the tine is sustained by the cap, and that in turn is supported by the sheet-metal ferrule; hence the tine cannot work loose in the handle either from concussion or strain or from the shrinkage of the wood.

In the drawing, Figure 1 is a longitudinal section of my improvement, and Fig. 2 is a plan of the same.

a is the handle, provided with the ferrule *b* and straps *c* and *d*, as usual, these being of sheet metal of the desired lightness and strength. *d'* is the cap, made hollow, with a nearly-cylindrical recess in one end, to be placed over the end of

the ferrule *b*, and provided with a hole into which the tang *f* of the fork is inserted; and a pin, *g*, passing through the handle *a*, secures the tang firmly to its place, and the cap cannot slip back upon the tang because the parts are firmly driven together, and the enlargement of the tang or the fork sets against the end of the cap; or the cap may be brazed to the ferrule when the latter is being manufactured.

It will be seen that this cap gives sufficient strength at the point where it is needed without increasing the weight of the other parts; and shrinkage of the handle, concussion, or strain will not cause the fork to become loose, as is the case where the old style of ferrule is used; and this cap can be applied to the usual ferrule and strap, as it does not require any special construction of that ferrule for receiving the cap, the parts only requiring to be of the proper size; and the hole in the ferrule is to be either square or elongated, to suit the tang.

The ferrule *b* and cap *d'* are shown separately in Figs. 3 and 4.

I claim as my invention—

The cap *d'* formed with a hole to receive the tang *f*, and with a cylindrical recess into which the ferrule is passed, as and for the purposes set forth.

Signed by me this 18th day of April, A. D. 1871.

DANL. MOORE.

Witnesses:

GEO. D. WALKER,
GEO. T. PINCKNEY.

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