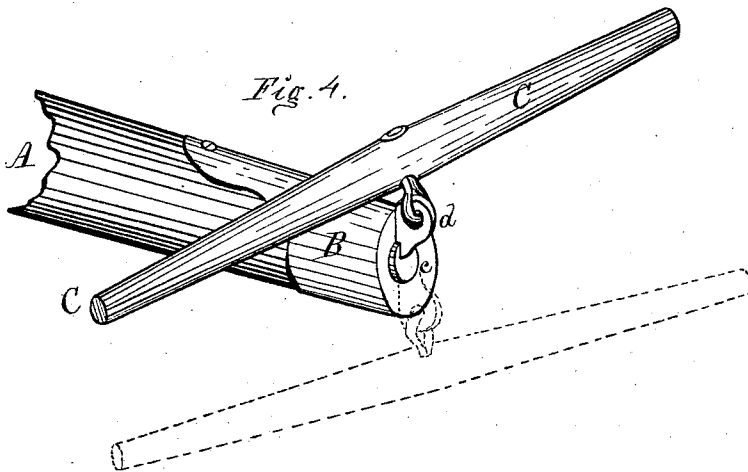
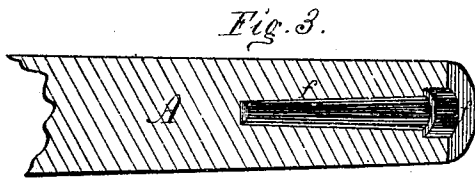
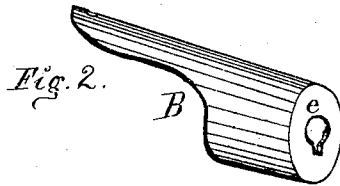
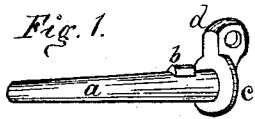


W. W. SKINNER.

Improvement in Neck-Yokes and Pole-Couplings.

No. 131,033.

Patented Sep. 3, 1872.



Witnesses.

H. Lewis.
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UNITED STATES PATENT OFFICE.

WILLIAM W. SKINNER, OF DES MOINES, IOWA.

IMPROVEMENT IN NECK-YOKES AND POLE-COUPPLINGS.

Specification forming part of Letters Patent No. 131,033, dated September 3, 1872.

SPECIFICATION.

Specification describing a certain Improved Neck-Yoke and Pole-Coupling, invented by WILLIAM W. SKINNER, of Des Moines, in the county of Polk and State of Iowa.

The object of my invention is to provide a more simple, convenient, and secure coupling for connecting a neck-yoke to a carriage-pole. It consists in forming a coupling-pin with a catch, a flange, and an ear, and combining and using the same with a neck-yoke and pole, in the manner hereinafter fully set forth.

Figure 1 of my drawing is a miniature perspective view illustrating the form of my coupling-pin. It is made of cast metal, complete in one piece, and may vary in size. *a* is the pin of tapering form. *b* is a catch on the upper side and near the rear end, and may vary in shape. *c* is an annular flange on the rear end. *d* is an ear standing upward and forward from the flange *c* and rear end of the pin *b*.

Fig. 2 is a metal band or socket designed to encase the front end of the pole. It may be cast complete in one piece and vary in form. *e* is a round opening in the center of the face with a slot or enlargement on the under side, designed to admit the passage of the catch *b* on the pin *a*. The form of the slot may vary, but must conform with the shape of the catch *b*.

Fig. 3 is a half section of the front end of a pole, and shows the manner of preparing the wood before the band B is attached. *f* is a bore designed to admit the pin *a*. The enlargement at the end of the bore provides a cavity, in which the catch *b* operates.

Fig. 4 is a miniature perspective view illustrating the manner of combining and co-operating the several parts. The dotted lines indicate the position in which the neck-yoke and coupling-pin are held when introduced to the pole. By turning the yoke to the position re-

quired for use the pin is also turned thereby, and the catch *b* brought to the top, where it will bear against the inside of the band B. This catch device for holding two separate parts together is in common use; but by the manner in which I use it, in combination with the bore in the pole and the long pin *a*, the flange *c*, the ear *d*, and yoke C, a new and useful result is accomplished. The long pin *a* and the flange *c* form bearings to keep the neck-yoke in a proper position when in use, and at the same time admit of a swivel-joint movement in the coupling. To disconnect the yoke from the pole invert its position, as indicated by the dotted lines, and withdraw the pin.

My coupling is specially designed for cultivators, but is equally well adapted for all kinds of carriages where a neck-yoke is required.

I am aware that a socket, a shank or pin, and a neck-yoke have been combined with a pole to produce a swivel-joint coupling. I claim, however, that my form of coupling-pin and manner of locking the same to the pole is a new and useful improvement, by which means the neck-yoke will be held in its place more securely when in use. If a trace or single-tree breaks, or any other accident occurs to lengthen the space between the horses and the carriage, my coupling-pin will be held secure and the carriage thereby governed, and more serious accidents prevented.

Claim.

I claim as my invention—

The coupling-pin, composed of the parts *a b c d*, as illustrated in Fig. 1, when combined and operated with a neck-yoke and pole, in the manner described.

WILLIAM W. SKINNER.

Witnesses:

JOHN GOLDING,
CHAS. S. SCOFIELD.