2 Sheets—Sheet 1.

R. WINTERBOTHAM.

Grain-Cradle.

No. 210,388. **Patented Nov. 26, 1878.**

Fig. 1.

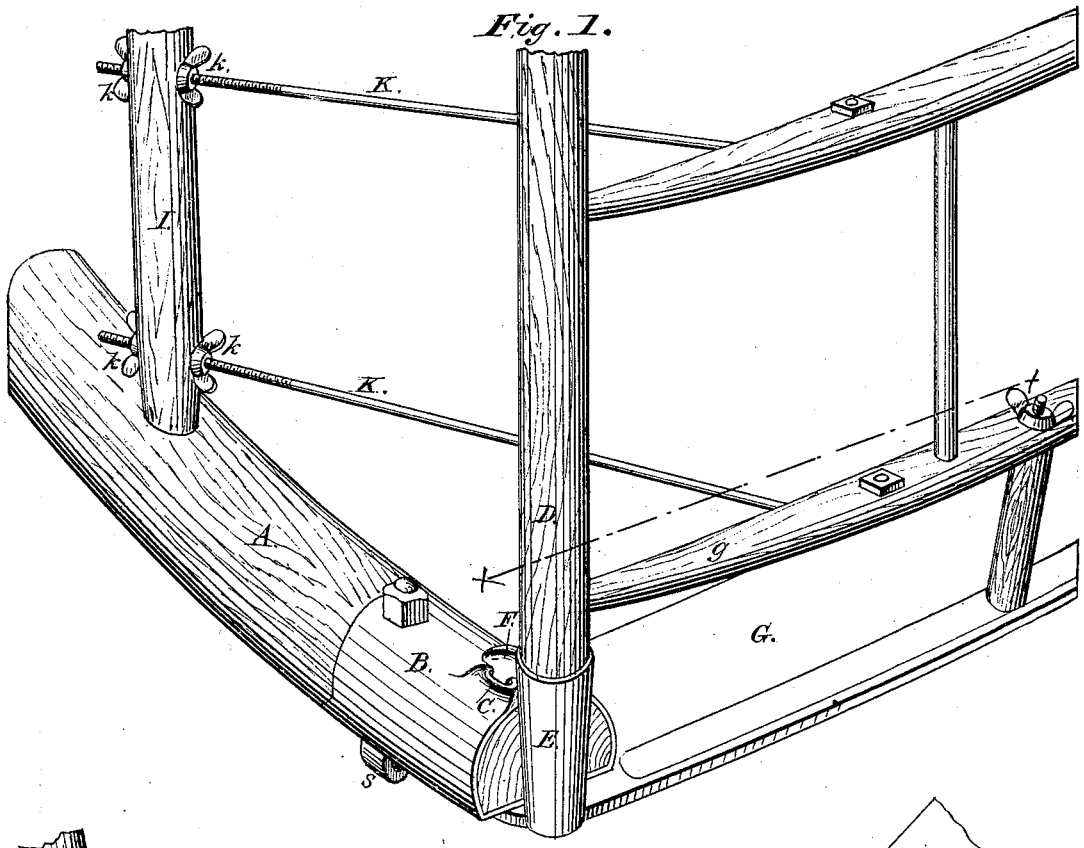
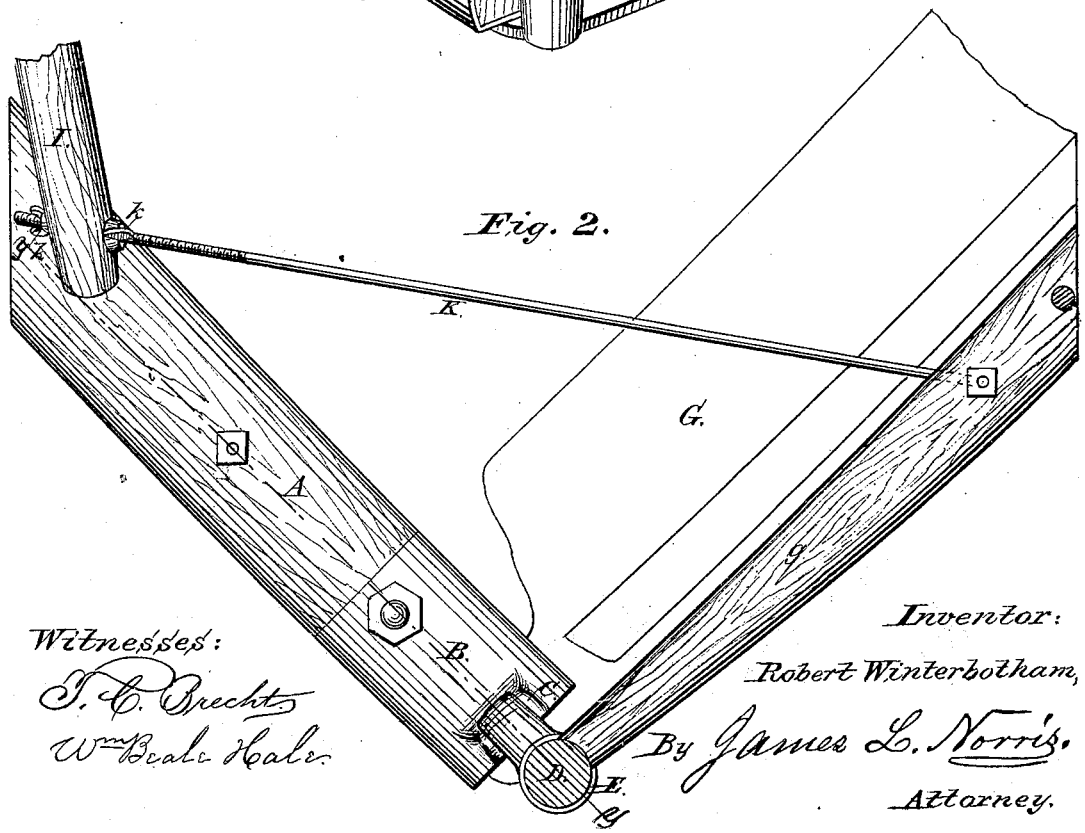


Fig. 2.



Witnesses:
T. C. Brecht
Wm Beale Hale

Inventor:
Robert Winterbotham,
By James L. Norris.
Attorney.

2 Sheets—Sheet 2.

R. WINTERBOTHAM.

Grain-Cradle.

No. 210,388. Patented Nov. 26, 1878.

Fig. 3.

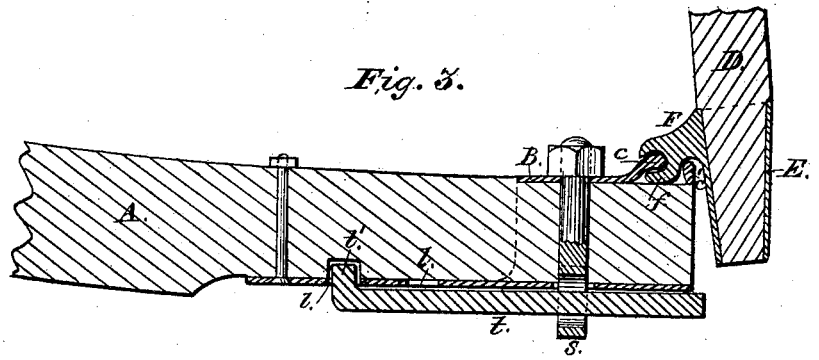


Fig. 4.

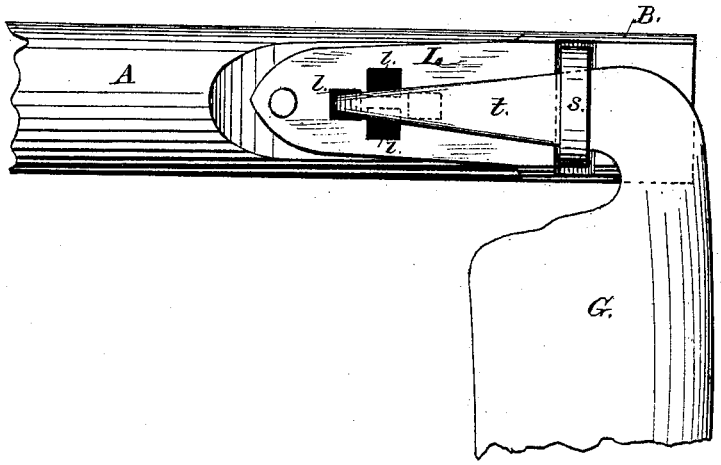
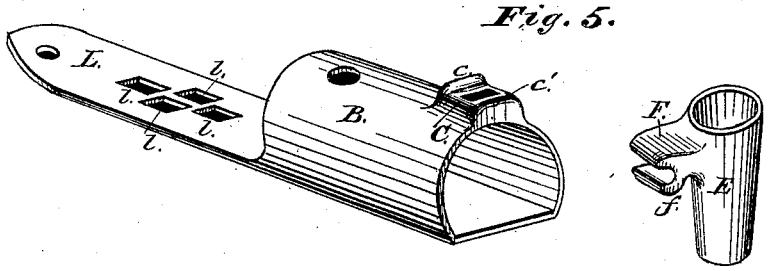


Fig. 5.



Witnesses:
T. C. Brecht
Wm Beale Hale

Inventor:
Robert Winterbotham,
By James L. Norris,
Attorney.

UNITED STATES PATENT OFFICE.

ROBERT WINTERBOTHAM, OF COLUMBUS, OHIO, ASSIGNOR TO BROWN, HINMAN & CO., OF SAME PLACE.

IMPROVEMENT IN GRAIN-CRADLES.

Specification forming part of Letters Patent No. **210,388**, dated November 26, 1878; application filed November 19, 1878.

To all whom it may concern:

Be it known that I, ROBERT WINTERBOTHAM, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Grain-Cradles, of which the following is a specification:

This invention relates to an improvement in devices for attaching the finger-post of a cradle to the snath; and its object is to provide a strong, elastic, and quickly-adjusted fastening, not liable to become loose, broken, or twisted out of proper position.

Heretofore the finger-posts of cradles have had their lower ends mortised into the wood of the snaths, or have been connected to the snaths by hinge-joints.

A mortise in the snath for the finger-post of the cradle is objectionable from the fact that in it the finger-post is very liable to wear loose. It also weakens the snath, rendering it liable to split. A hinge-joint for the finger-post and snath is expensive and liable to be twisted or broken, as the parts giving them the articulation must fit snugly together without making allowance for lateral strain on the finger-post.

In overcoming the objections to the old forms of devices referred to, my invention consists in an improved means of attaching the cradle finger-post to the snath, the same consisting in a ring or open ferrule adapted to fit the heel of a snath, and having a socketed seat projecting diametrically therefrom, in combination with an open ferrule adapted to fit upon the lower end of a finger-post, and provided at one end with a diametrically-projecting arm, having a lug projecting therefrom in the direction of the main portion of said ferrule, and adapted to fit in and interlock with the socket in the seat on the ferrule or ring of the snath, as more particularly hereinafter described.

In the accompanying drawings, Figure 1 is a perspective view of a cradle constructed with my improvements. Fig. 2 is a sectional view taken on line *x x*, Fig. 1. Fig. 3 is a section on line *y y*, Fig. 2, showing the preferred internal configuration of the socket on the snath ring or ferrule and the interlocking-lug of the finger-post ferrule. Fig. 4 is a view of the snath ring or ferrule and the finger-post ferrule detached and in position as about to be interlocked.

The letter A indicates the snath of the cradle, and B is the ring or ferrule surrounding its heel. This ring or ferrule may be secured to the snath by any convenient means.

C indicates a socketed seat projecting from the ring or ferrule B. The outer-side wall, *c'*, of the socket is substantially straight and even with the outer edge of the ferrule; but the inner wall, *c*, curves downwardly away from the other wall, or toward the inner end of the ferrule or ring B, so that it overhangs toward the outer wall. The outer edge of the ferrule B is flush with the end of the snath.

The letter D indicates the finger-post of the cradle. The lower end of this finger-post is provided with an open-end ferrule, E, from the upper end of which projects an arm, F, having a downwardly-projecting and outwardly-curved lug, *f*, of suitable size and shape to fit into the socket in the seat C, and hug under the curved wall thereof. When this lug is inserted in said socket, the outer end of arm F rests upon the top of the inner wall of the seat C; but the inner under portion of arm F is cut away upward, so as to allow an adjusting play of the ferrule E, which projects across the end of the snath, in such position that the finger-post inclines toward the snath sufficiently far to bring the lower finger, *g*, over the back of the blade G, from end to end, so that between the front edge of this finger and the back of the blade there is no vertical space or passage through which cut grain can fall.

The letter I indicates an inclined brace, to which the fingers of the cradle are connected by rods K, which may have their tension regulated by the thumb-nuts *k k* on the screw-threaded ends of said rods, which pass through the brace. Any of the ordinary cradle-braces may, however, be used.

The ring or ferrule B of the snath has a projecting web or plate, L, which lies along the chamfered under side of the snath, and is provided with the usual sockets *l* for receiving the toe of the tang of the scythe, and these sockets are so located that when the toe *t'* is inserted therein and the tang *t* is secured by the

ordinary eyebolt *s* the back of the blade will be very nearly even with the end of the snath.

The ferrules for the snath I prefer to make of malleable iron, as being cheaper, stronger, and better adapted for proper finishing than most other metals. The method of interlocking the two ferrules is extremely simple, and the two parts so yield with respect to each other that there is no liability of the breakage of either under strain. The seat and lug being of metal, there is no appreciable wear. There are no bolts, screws, or pins necessary to hold the snath and finger-post together, and therefore there is no danger of their accidental separation.

By means of the simple form of attaching devices, it will be seen that when the cradles are shipped, as they usually are, in lots, with the parts detached and packed in boxes or otherwise, the snath and finger-post are very readily secured together by simply inserting the curved lug into the socketed seat of the snath-ferrule. It will also be seen that when the brace I is dispensed with, and the rods K lead from the finger direct to and through the snath, as in the ordinary wire-brace cradle, the interlocking devices will act as an adjustable connection and permit the arrangement of the fingers at different angles with respect to the snath, this adjustment being effected by drawing the rod either one way or the other through the snath, and securing them by means of the thumb-nuts.

Having now fully described my invention, I claim—

The improved means of attaching the cradle finger-post to the snath, the same consisting in a ring or open ferrule adapted to fit the heel of a snath, and having a socketed seat projecting diametrically therefrom, in combination with a ferrule adapted to fit upon the lower end of a finger-post and provided with a diametrically-projecting arm, having a lug projecting therefrom and adapted to fit in and interlock with the socket in the seat on the ferrule or ring of the snath, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

ROBERT WINTERBOTHAM.

Witnesses:

W. H. ENGLISH,

LORENZO ENGLISH.