W. W. Bryan,
Grain Cradle.

No. 16264

Patented Dec. 23 1856

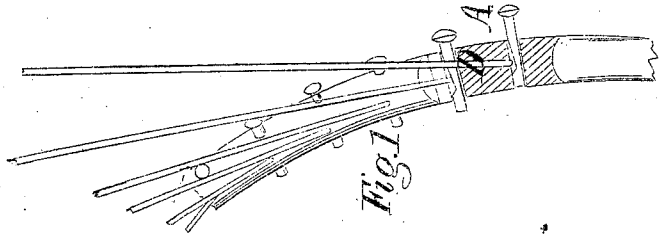
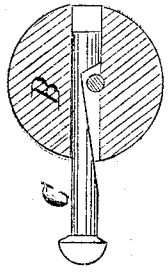
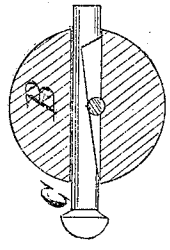


Fig. 1.

Fig. 2.





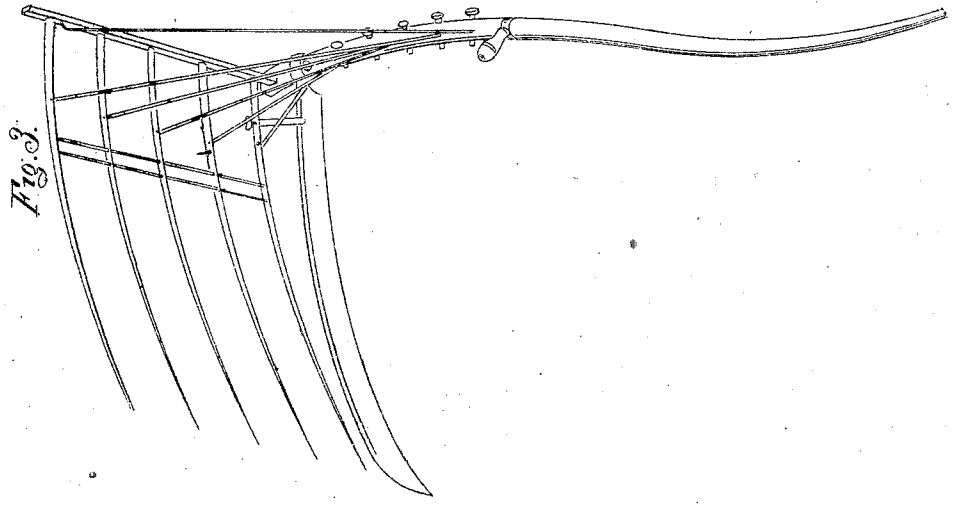


Fig. 3.

UNITED STATES PATENT OFFICE.

WILLIAM W. BRYAN, OF SCHAGHTICOKE, NEW YORK.

IMPROVED MODE OF SECURING BRACES IN THE SNATH OF A GRAIN-CRADLE.

Specification forming part of Letters Patent No. **16,264**, dated December 23, 1856.

To all whom it may concern:

Be it known that I, WILLIAM W. BRYAN, of the town of Schaghticoke, county of Rensselaer, and State of New York, have invented a new and Improved Mode of Fastening or Securing Braces in the Snaths of Grain-Cradles; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and letters of reference marked thereon.

The nature of my invention consists in the peculiar form, construction, and operation, in its practical effect, of a wedged-formed bolt or pin, for the purpose of holding firmly and at the same time fastening a brace to the snath of the cradle, and thereby securing the required position of the "cradle-fingers."

Various modes have been heretofore resorted to for the purpose of securing and permanently sustaining the fingers of a grain-cradle, while in use, in their proper and relative position, and at the same time loosening them for alteration and adjustment.

It is well known by experience that much inconvenience has heretofore existed in securing the "finger-braces" to the snath, and for this purpose various modes have been resorted to, such as wedges being forced in the wood of the snath, thereby wedging the brace; another device, a screw forced into the timber, and thereby compress the brace; another, a pin having a hole in its one end, which is inserted in the snath, in depth sufficient to receive the brace-rod, and at the other a male and female screw; and also various other modes have been from time to time resorted to, each and all of which have been found to be attended with much inconvenience and loss of time to the farmer or practical operator. Some of these devices were insufficient to hold and sustain the brace, others requiring tools or instruments inconvenient for the operator to have continually at his command, and each and all of the different devices heretofore known or used were by use and otherwise subject to being lost, thereby subjecting the operator to a great inconvenience and loss of time to procure the required substitute.

After many years of practical experience in the manufacture of grain-cradles, and practically ascertaining the many difficulties resulting from the want of a device which would obviate such annoyance and loss of time, I have invented a device which will hold the brace firmly, and thereby hold the fingers at their desired angle, and can be operated without extra tools or implements, as the braces by this device can be secured by the aid of any ordinary substance always at hand, almost at any and all places or all localities, as will be seen in the description in this specification; and, one other advantage of equal importance, (if not more,) by this simple device the accidental loss of any of the appendages described is wholly obviated, as no part can be inadvertently misplaced or lost, the form in its application relieving the apparatus from its displacement by accident or otherwise.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my grain-cradle in any of the known forms, including the fingers and braces, the latter extending from the fingers and braces, and passing through the snath at or near the center of the diameter, as represented by Figure 1, letter A. In a direct diagonal line, and in proportionate proximity to the brace-rod, I make another hole, as represented by letters B B, to receive this brace. I make another hole, as represented by letters C C, to receive a wedge-form bolt, whereby the brace-rod may be compressed by a wedge. I reduce the bolt from near its one end to a wedge form. To receive its other end, at the terminus of the wedge I leave a square shoulder, as represented by Fig. 2. Thus in its application this bolt or wedge-formed pin is inserted in the hole, letters C C, after which the brace-rod D is inserted.

It will be seen by referring to Fig. 2, B, that the simple device of the shoulder at the small terminus of the smallest point of the wedge-bolt prevents the bolt dropping out of its place, and thus prevents its loss. The cradle-finger is then brought to its proper angle, and the bolt is then forced downward sufficient to hold the brace. It will be also seen

that by starting this wedge-bolt upward the brace-rod is entirely loose and convenient for adjustment.

Reference being had to the sectional drawings, Fig. 3 represents the instrument in full.

Having thus described the nature of my invention, I do not claim the form or construction of the bolt, separately considered; but

What I do claim, and desire to secure by Letters Patent, is—

The application of a wedge-formed bolt or pin, in the manner and for the purpose herein set forth and described.

WM. W. BRYAN. [L. S.]

Witnesses:
H. N. WALES,
N. M. MASTERS.