

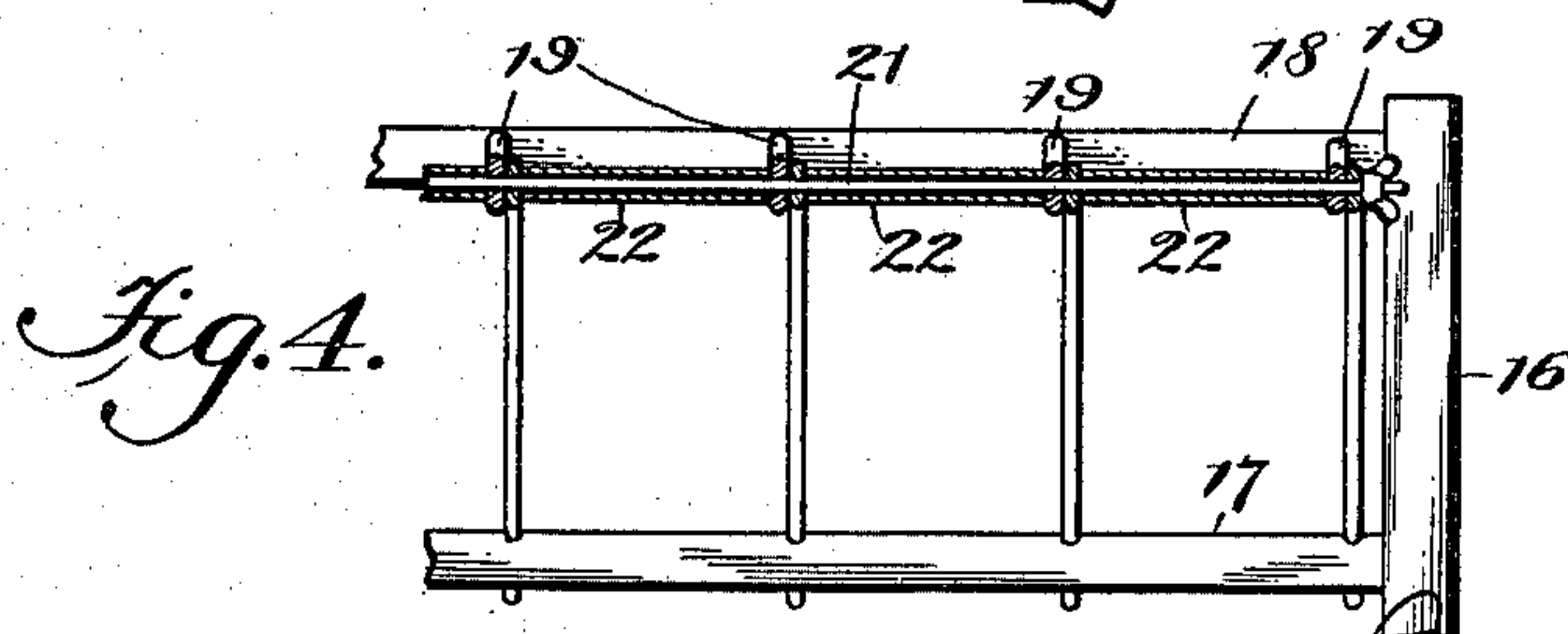
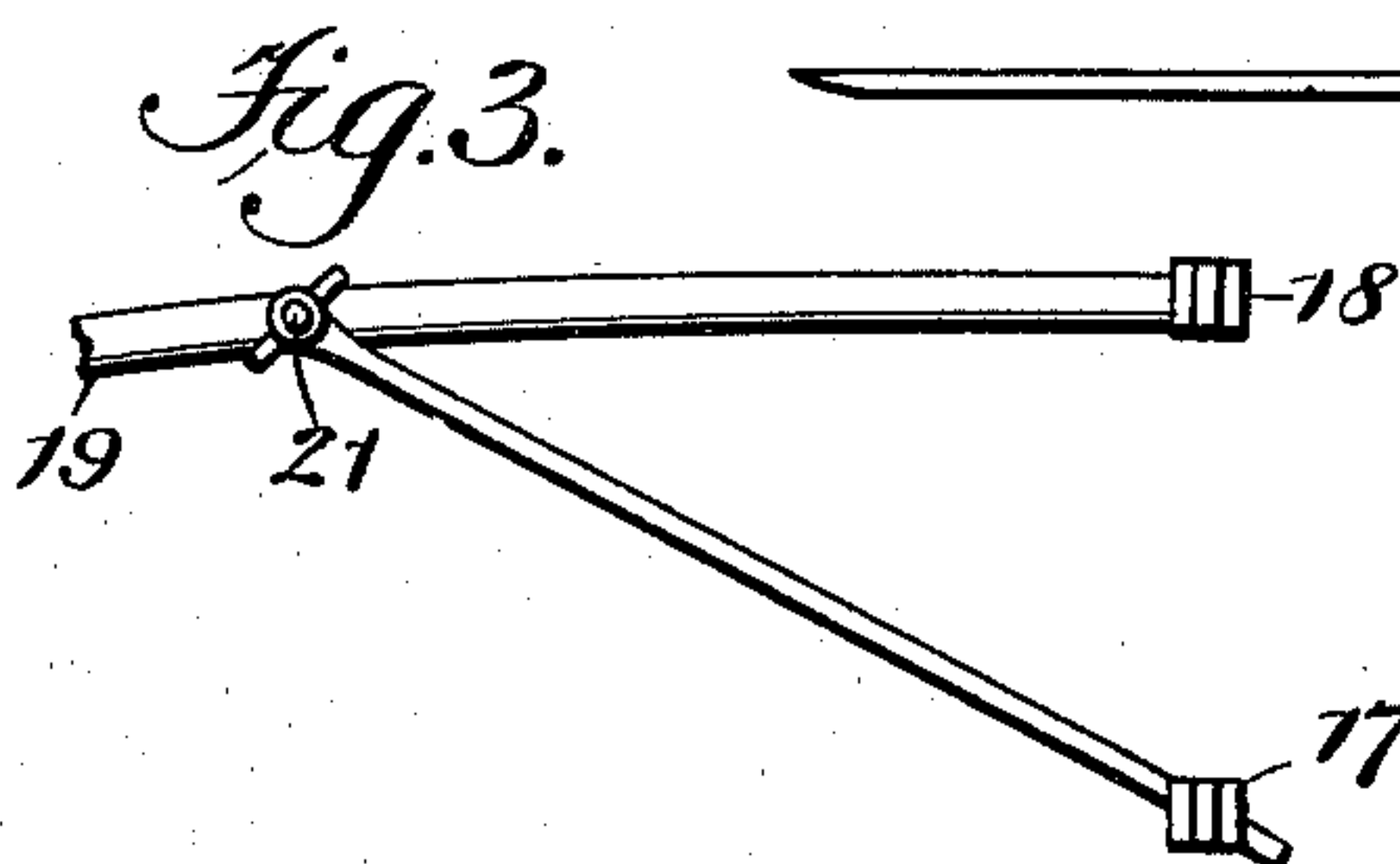
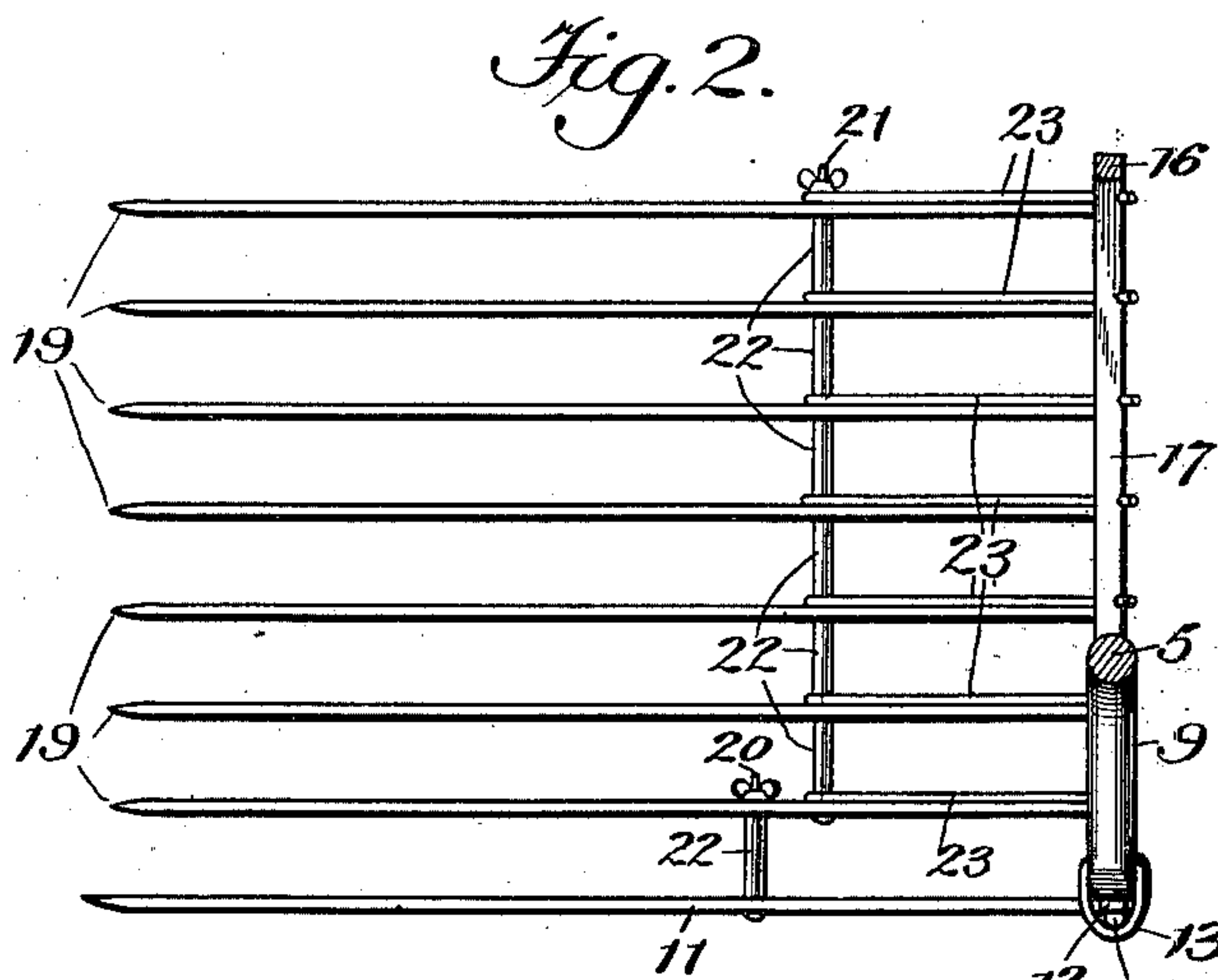
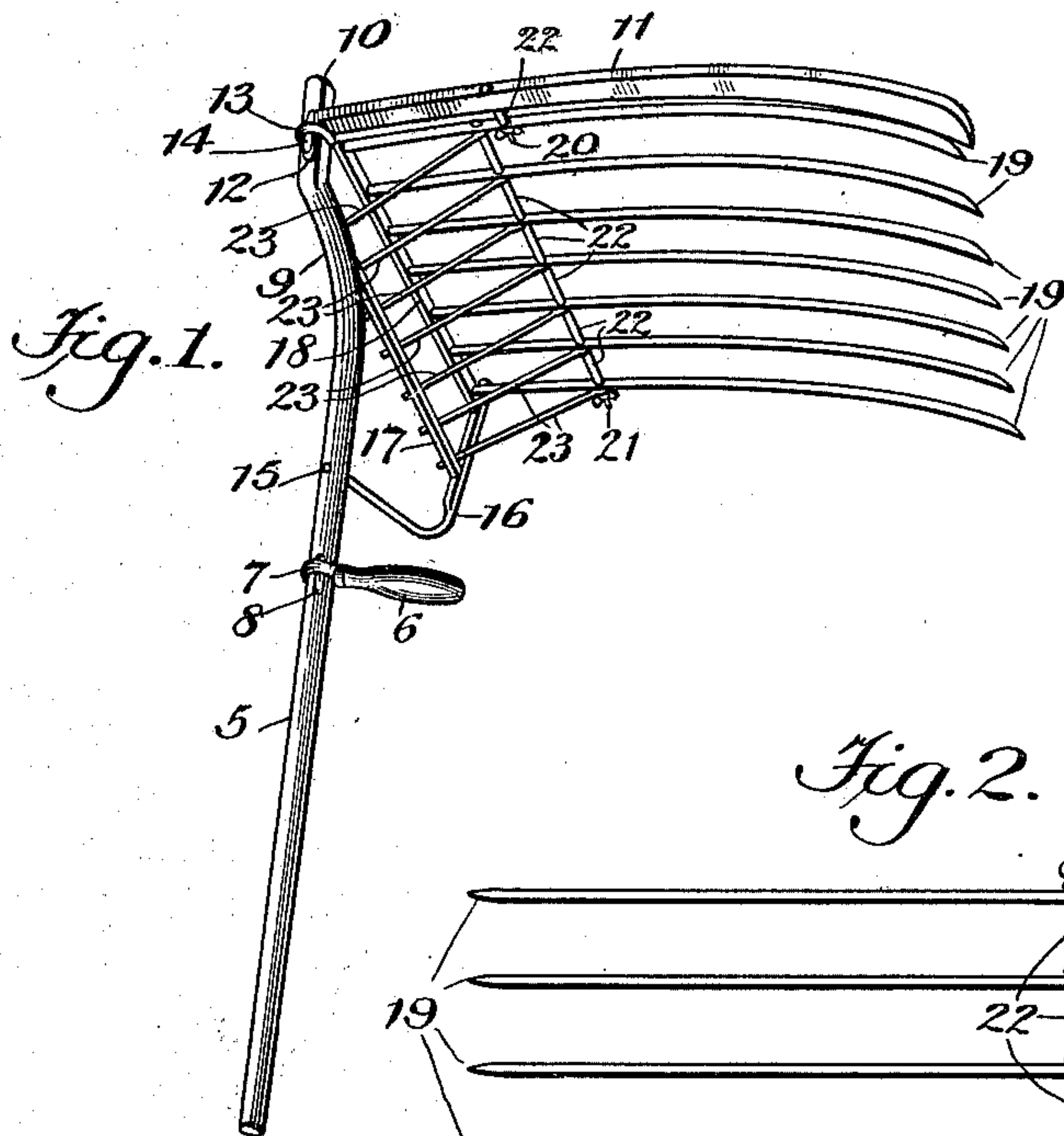
No. 734,672.

PATENTED JULY 28, 1903.

J. C. COUNTS.  
GRAIN CRADLE.

APPLICATION FILED OCT. 6, 1900.

NO MODEL.



Witnesses:  
*A. R. Appleman*  
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*J. R. Littell,*



# UNITED STATES PATENT OFFICE.

JACOB C. COUNTS, OF PROSPERITY, SOUTH CAROLINA.

## GRAIN-CRADLE.

SPECIFICATION forming part of Letters Patent No. 734,672, dated July 28, 1903.

Application filed October 6, 1900. Serial No. 32,224. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB C. COUNTS, a citizen of the United States, residing at Prosperity, in the county of Newberry and State of South Carolina, have invented certain new and useful Improvements in Grain-Cradles, of which the following is a specification.

This invention relates to grain-cradles; and it has for its object to provide an improved grain-cradle which in its arrangement and construction of parts is adapted for extreme rigidity and positiveness of operation and which will be easy to manipulate, owing to the thorough balancing and bracing of its several parts.

My invention is also designed for special efficiency in harvesting, serving to cut the grain clean and deposit it accurately in position to be bundled.

In the drawings, Figure 1 is a perspective view of a grain-cradle constructed according to my invention. Fig. 2 is a sectional plan view thereof. Fig. 3 is a plan view of the several parts constituting the main brace construction in detached position. Fig. 4 is a detail sectional elevation, enlarged, showing the relative arrangement of fingers, their tie-rod, braces, and abutment-pieces.

Corresponding parts in all the figures are denoted by the same reference characters.

Referring to the drawings, 5 represents the snead of my improved grain-cradle, and 6 the handle thereof, which is angularly secured thereto by the usual end ring 7, which encircles the snead and between which and the snead is passed a key 8. The outer end portion of the snead is outwardly bowed, as at 9, and directed in parallelism with the main portion at its extreme end 10, at which point it carries the knife 11, which is provided at its inner end with an angularly-directed finger 12, which is passed between the snead and a ring 13, which encircles the snead and between which latter and the finger 12 is passed a key 14. Secured at one end, as at 15, to the snead is a bow-piece or brace 16, which ranges laterally and downwardly therefrom and between the outer portion of which and the snead extend two abutment-pieces 17 and 18, respectively, in the latter or lowermost of which are seated and secured the inner ends of fingers 19, of which seven are shown and

which are of the usual or any preferred form and extend in parallelism with the knife 11, forming therewith, in a series, the cradle-body. The finger 19 next adjacent the knife 11 is connected therewith by a bolt or pin 20, thus determining the relative spacing of the said finger and the knife and causing a predetermined contact of both thereof with the standing grain, one to cut and the other to receive the same, and guide it into the cradle. A bolt or brace member 21 is passed through the fingers 19, at a predetermined distance from the inner ends thereof, and carries a plurality of canes or collars 22, which are interposed each between two of the fingers 19, serving to relatively brace the same, the said bolt being secured in position in any desired manner by end nuts, as shown, or otherwise.

Between the bolt 21 and the abutment-piece 17 extend a plurality of braces 23, arranged in a series transversely of the cradle-body, the inner ends of the braces 23 being secured in the abutment-piece 17 and the bolt 21 being passed through the outer ends thereof, as shown. Each of the braces 23 is arranged at the side of one of the fingers 19 and between the same and the end of one of the canes or collars 22.

The braces 23 conserve a rigid relation between the fingers and the abutment-piece 17, maintaining the fingers in true position angularly relative to the plane of the snead and the bow-piece 16. The braces 23, also in a specific aspect of rigidity, prevent in combination with the abutment-piece 17 and bolt 21 a lateral movement or oscillation of the fingers and also of the knife 11, which latter is secured by the bolt 20 to one of the fingers, as above described.

The knife 11 and the fingers 19 extend substantially at right angles to the snead 5, which causes the knife to cut the grain clean and positively and prevents the spilling of the grain from the cradle-body. The outer ends of the knife and fingers, as shown, are curved slightly to cause a more efficient operation.

In use my improved grain-cradle is positive in operation, the knife presenting a firmly-maintained cutting edge to the standing grain and the fingers receiving firmly the cut grain to deposit the same in position for binding. It is manifest, furthermore, that the weight



of the grain imposed upon the fingers and coming in contact with the knife is transmitted to the snead at a plurality of points through the agency of the bow-piece 16, the abutment-pieces 17 and 18, and the knife 11, the result being a cradle of perfect operative poise or balance and a consequent ease of operation.

A cradle constructed as above described is less liable to fracture and dismemberment, and these features of durability qualify it for use in unskilled hands and under adverse natural circumstances, such as are furnished by stony, boggy, or otherwise rough fields. It will also be noted that the brace portion, consisting of the braces 23 and abutment-piece 17, ranging as it does at an angle to the plane of the fingers of the cradle-body serves as a stop for the grain deposited upon the cradle-body in the swinging stroke of the cradle-body through the standing grain, preventing the displacement of the cut grain from the cradle-body and tending to bunch it and facilitate the act of binding it.

Having thus described my invention, I claim and desire to secure by Letters Patent—

In a grain-cradle, the combination, essentially, of the following instrumentalities, viz: a snead having its lower portion curved outwardly and terminating in a straight end portion in parallelism with its main body, and

having a rectangularly-disposed handle, two parallel abutment-pieces extending at right angles from the straight end portion of the snead, a bow-piece extending laterally from the snead above its curved portion and downwardly across the ends of the parallel abutment-pieces and secured thereto, a knife or scythe secured to the straight end portion of the snead and extending approximately at right angles therefrom, a plurality of spaced fingers carried by and extending from the lowermost of the abutment-pieces in parallelism with the knife or scythe, a cross-bolt securing one of said fingers to said knife or scythe, a tie-rod bolted through all of said fingers toward the inner ends thereof and carrying spacing canes or collars—one between each pair of fingers, and a plurality of braces—one for each finger—extending in an angular direction from said rod to the uppermost of the abutment-pieces, the same being rigidly secured to said rod and abutment-piece, all substantially as and for the purpose set forth.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

JACOB C. COUNTS.

Witnesses:

WM. A. MOSELEY,  
J. J. MAYER.