

No. 640,044.

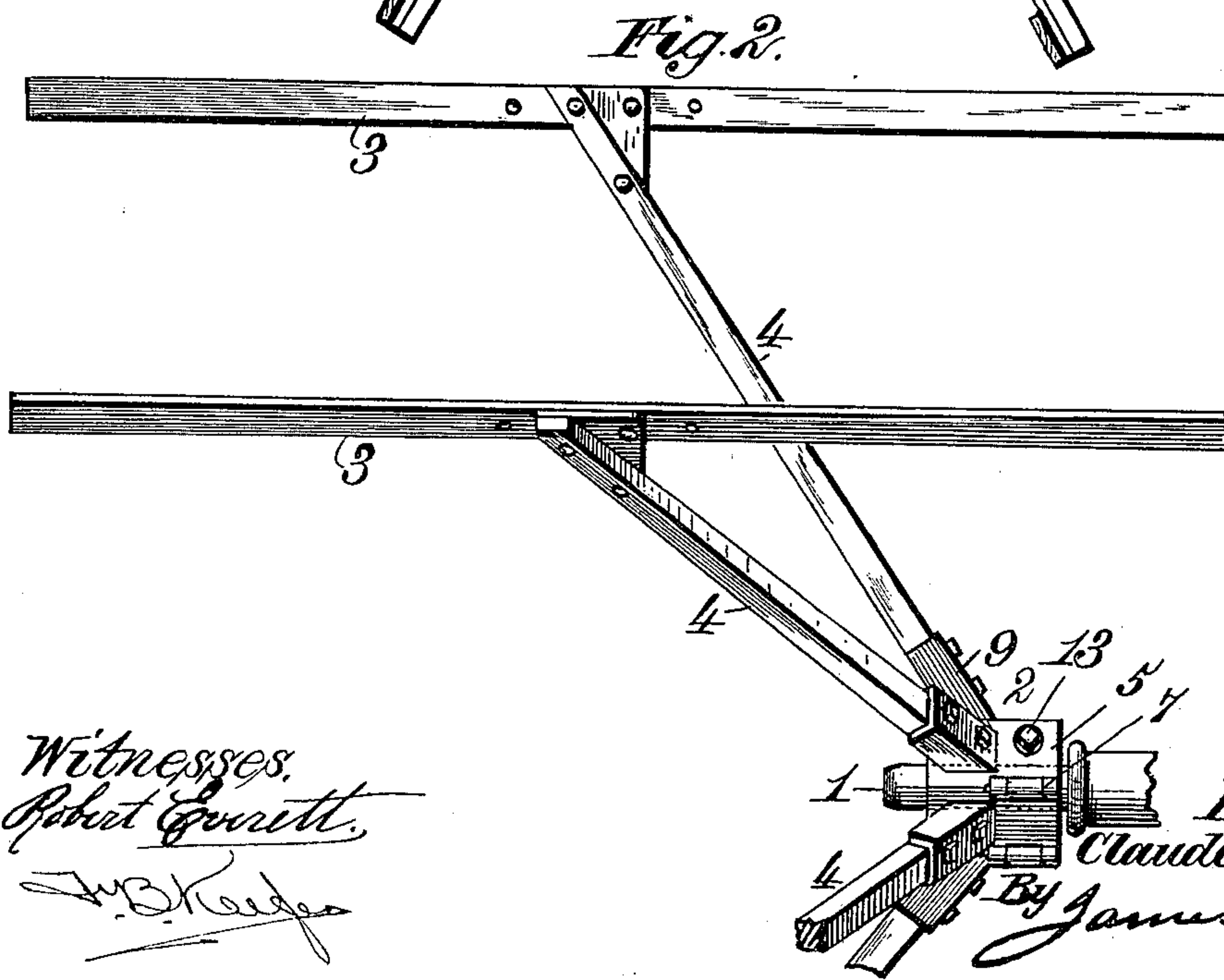
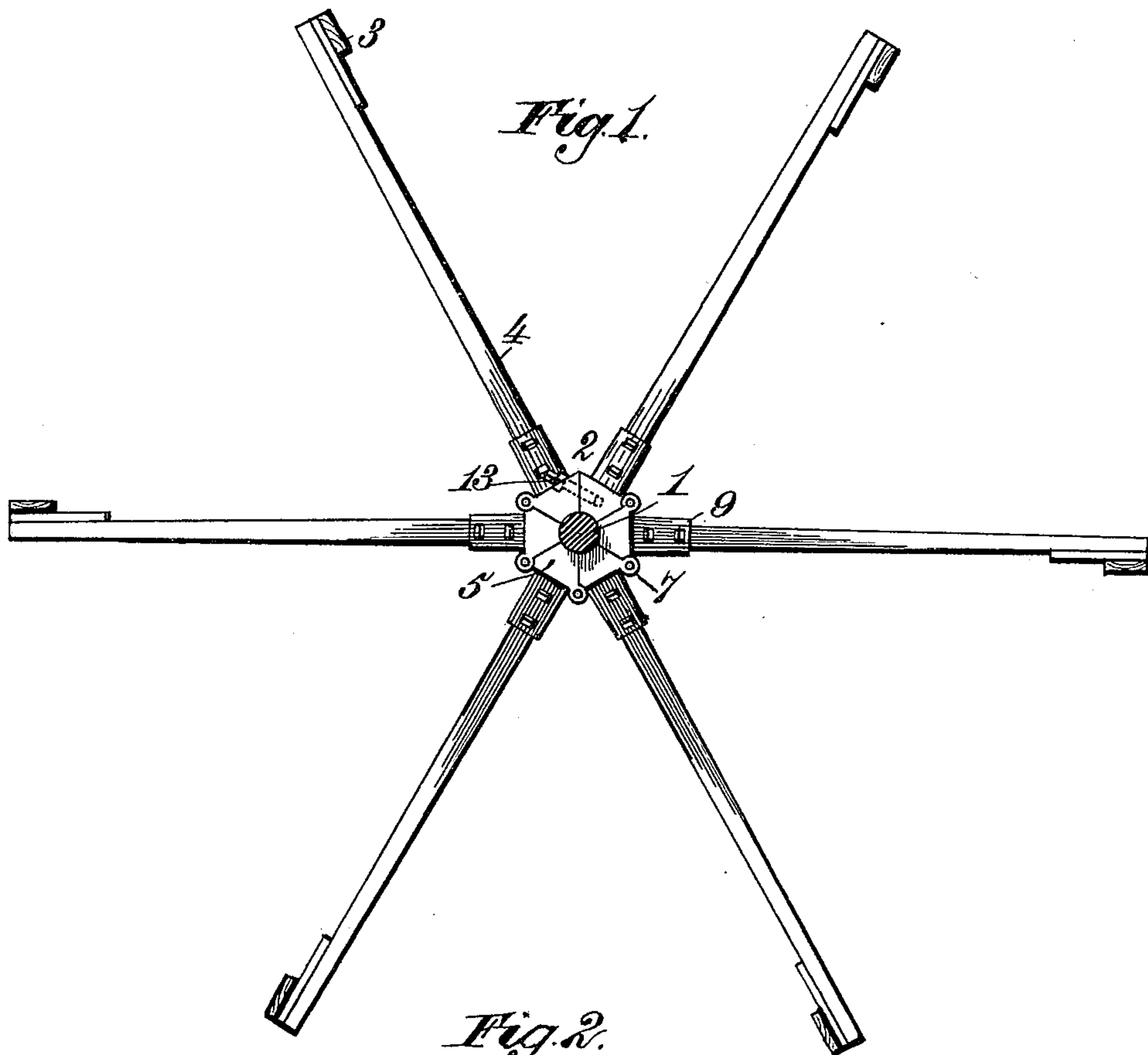
Patented Dec. 26, 1899.

C. W. STEWART.
HARVESTER REEL.

(Application filed Sept. 27, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:
Robert Everett,
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Inventor,
Claude W. Stewart.
By James L. Norris,
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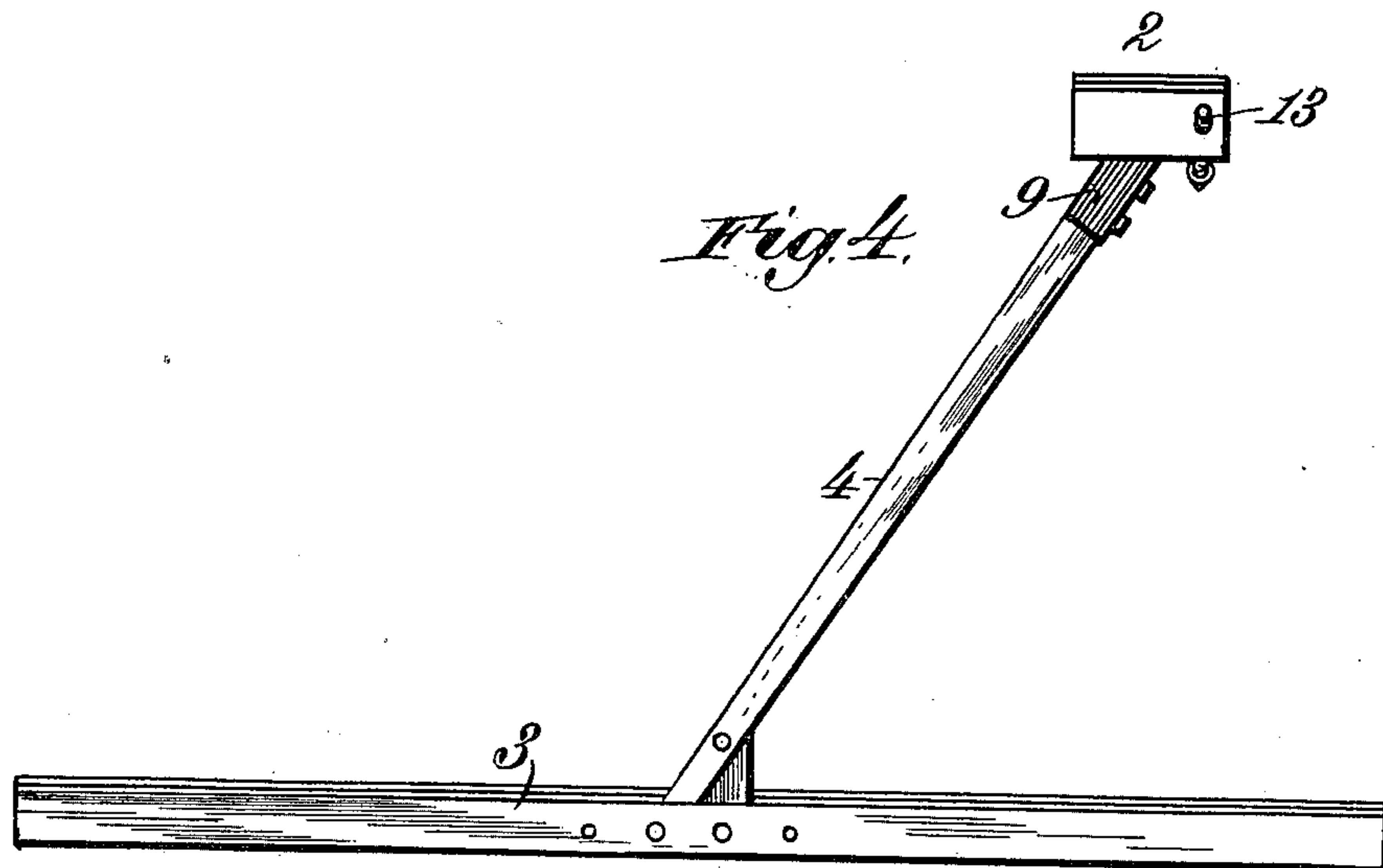
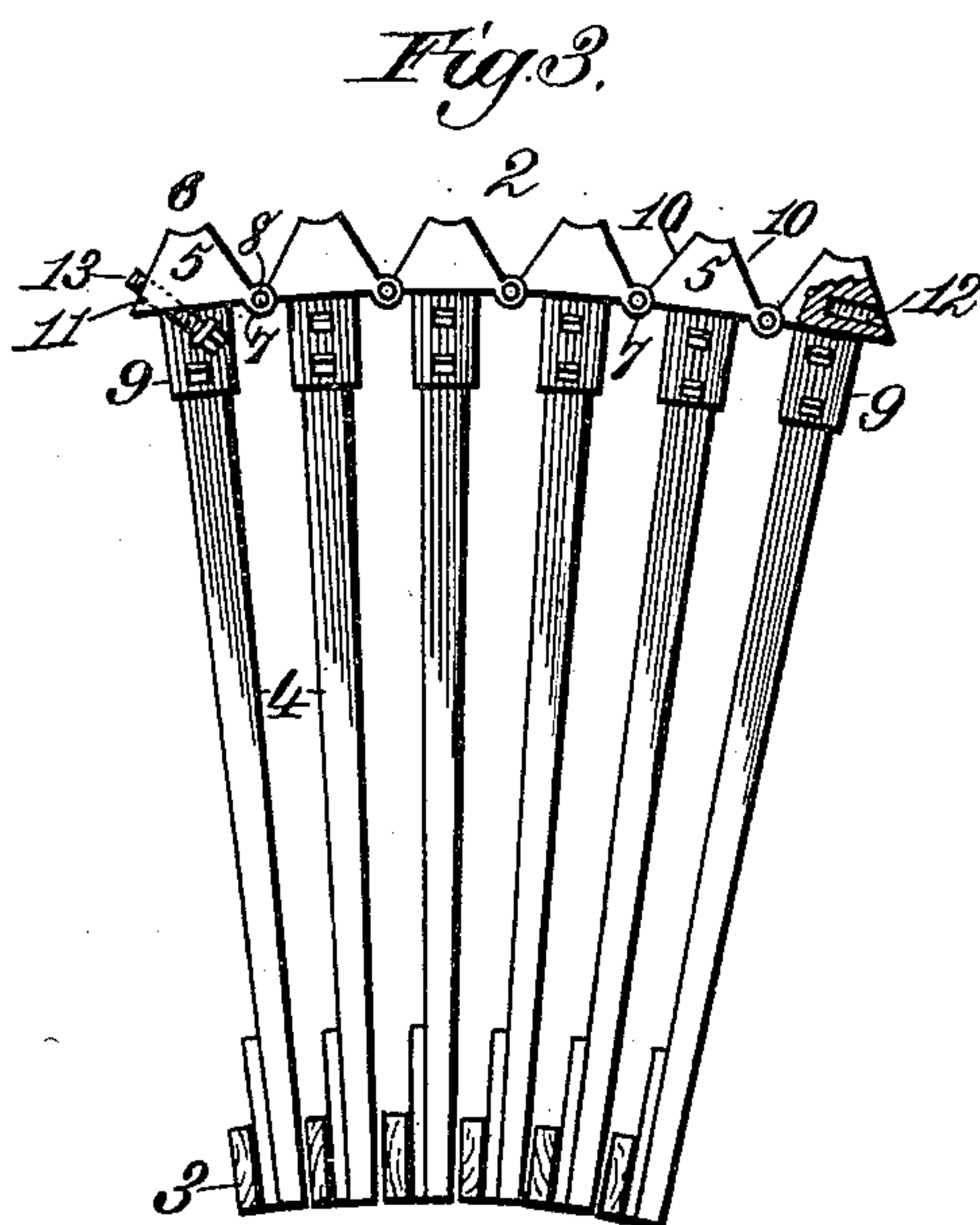
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UNITED STATES PATENT OFFICE.

CLAUDE W. STEWART, OF MARTINSBURG, WEST VIRGINIA.

HARVESTER-REEL.

SPECIFICATION forming part of Letters Patent No. 640,044, dated December 26, 1899.

Application filed September 27, 1899. Serial No. 731,859. (No model.)

To all whom it may concern:

Be it known that I, CLAUDE W. STEWART, a citizen of the United States, residing at Martinsburg, in the county of Berkeley and State of West Virginia, have invented new and useful Improvements in Harvester-Reels, of which the following is a specification.

This invention relates to harvester-reels, and has for its object to provide a harvester-reel of novel and simple construction that may be easily and quickly detached and removed from the reel-shaft and when so removed may be readily unfolded out into a flat and compact form, whereby when the harvester is not in use the reel may be conveniently stowed away in a small space for storage or transportation.

To this end my invention consists in the features and in the construction, combination, and arrangement of parts hereinafter described, and particularly pointed out in the claims following the description, reference being had to the accompanying drawings, forming a part of this specification, wherein—
Figure 1 is an end view of my improved reel set up in operative position. Fig. 2 is a view in side elevation thereof. Fig. 3 is a view similar to Fig. 1, showing the reel unfolded in position for storage; and Fig. 4 is a view in side elevation thereof.

The present invention relates in no way to the harvester itself, which may be of any ordinary or preferred construction and which is not, therefore, herein shown or described, excepting the usual reel-shaft, which is shown in dotted lines. The invention relates solely to the reel, which, briefly stated, comprises a plurality of straight arms arranged in a cylindrical plane and supported by inclined braces which at their inner ends are secured to a sectional hub, the sections of the hub being hinged at their adjacent edges to each other in such manner that the sections may be unfolded out flat or folded up into cylindrical form, means being provided for locking the sections in their folded position and clamping the hub on the reel-shaft.

In order that those skilled in the art may make and use my invention, I will now describe the same in detail.

Referring to the drawings, the numeral 1

indicates the usual reel-shaft; 2, the hub of the reel; 3, the reel-arms, and 4 the diagonal or inclined braces for supporting the reel-arms on the hub. The hub is formed of a plurality of independent or separate sections 5, of uniform size and shape and each substantially triangular in cross-section, the inner edge of each section being concaved or grooved, as at 6, to form a surface adapted to grip or grasp the reel-shaft, as will more fully hereinafter be made apparent. The outer adjacent edges of the hub-sections are hinged together in the following manner: Formed on each of the outer opposite edges of each hub-section 5, and preferably integrally therewith, is a hinge-leaf 7, of ordinary and well-known construction, each two adjacent hinge-leaves when the hub-sections are placed side by side being pivotally connected together by a hinge-pintle 8. An inclined socket 9 is formed in the outer end portion of each hub-section 5, and in said socket is fixed the inner end of a brace 4. To the outer end of each brace is rigidly fixed one of the reel-arms 3. The arrangement is such that when the hub-sections are folded up together, so that their opposite flat sides will lie in contact, all the hub-sections will unite to form practically a solid hub of hexagonal or similar geometrical shape, the braces 4 extending diagonally and radially outward from the hub and the reel-arms 3, carried by said braces, lying in a cylindrical plane concentric with the hub. The parts are locked in this position and at the same time immovably clamped on the reel-shaft 1 by the following means: Threaded sockets 11 and 12 are respectively formed in the end or unhinged sections of the hub, said socket being formed in such manner that when the hub-sections are folded up into position to form a hub the two threaded sockets 11 and 12 will register with each other, whereupon a machine-screw 13 may be inserted in the socket 11 and screwed into the socket 12, and the hub having been placed upon the reel-shaft 1 it is firmly secured in place thereon by screwing up the screw 13, thus tightly clamping the hub-sections about the shaft.

When it is desired to remove and store away the reel, it is only necessary to withdraw the

screw 13 or unscrew it from the socket 12, when the parts may be unfolded out flat in the position shown in Fig. 4 of the drawings, thereby converting the reel from a circular
5 to a flat form and enabling it to be packed away in a small space convenient either for storage or for transportation.

I have shown and described the hinge-leaves as formed integrally with the hub-sections;
10 but it will be evident that the hinges may be formed separately from said sections and attached to the latter, and it will also be evident that the reel-arms and braces may be connected to the hub-sections in manner dif-
15 ferent from that shown. Furthermore, the details of construction may be obviously altered without departing from the spirit of my invention, and therefore I do not wish to be limited to the exact construction shown,
20 such construction being merely illustrated as the preferred form and to enable my invention being clearly understood.

Having described my invention, what I claim is—

25 1. A folding harvester-reel, comprising a sectional hub consisting of a plurality of separate sections approximately triangular in cross-section and hinged together at their outer adjacent edges, reel-arms carried by
30 the hub-sections, and means for clamping said sections about a shaft, substantially as described.

35 2. A folding harvester-reel, comprising a sectional hub consisting of a plurality of separate sections each approximately triangular in cross-section and concaved on its inner edge to fit a shaft, said sections being hinged together at their outer adjacent edges, reel-arms carried by the hub-sections, and means

for clamping said sections about a shaft, sub- 40
stantially as described.

3. A folding harvester-reel, comprising a sectional hub formed of a plurality of separate sections approximately triangular in cross-
section and hinged together at their outer 45
adjacent edges, said sections when folded together in contact with one another operating to form a hub, reel-arms carried by said sec-
tions, and means for locking the sections in their folded position, substantially as de- 50
scribed.

4. A folding harvester-reel, comprising a sectional hub formed of a plurality of separate sections approximately triangular in cross-
section and hinged together at their outer 55
adjacent edges, diagonal braces attached to the outer faces of said hub-sections, reel-arms attached to the outer ends of said braces, and means for locking the hub-sections in their folded position, substantially as de- 60
scribed.

5. A folding harvester-reel, comprising a sectional hub formed of separate sections each approximately triangular in cross-section and
having hinge-leaves formed on its outer op- 65
posite edges, pintles connecting said hinge-leaves, a screw engaging the two end sections of the hub for clamping the latter about a shaft, and reel-arms carried by the hub-sections, substantially as described. 70

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CLAUDE W. STEWART.

Witnesses:

B. D. MYERS,
GEO. L. WEVER.