

(No Model.)

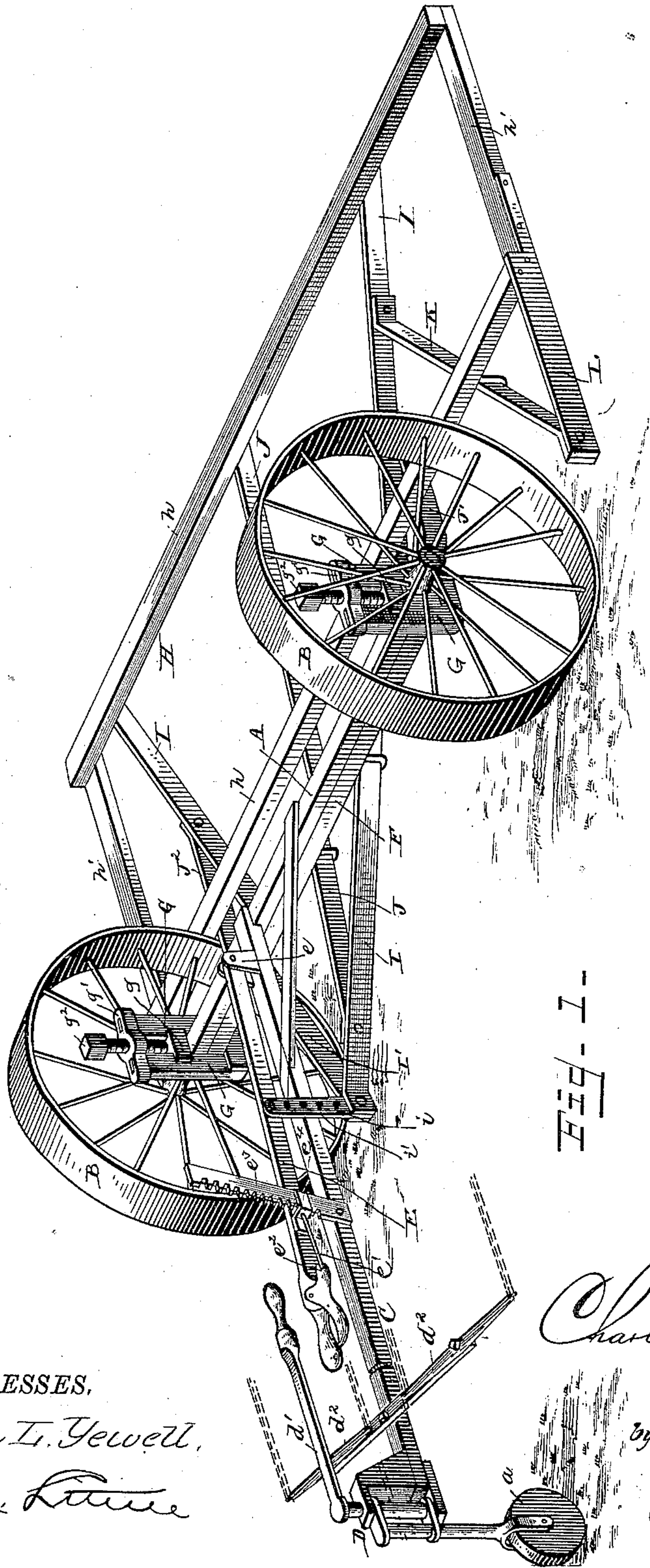
3 Sheets—Sheet 1.

C. S. STICKLE.

HARVESTER.

No. 398,467.

Patented Feb. 26, 1889.



WITNESSES,

Edwin T. Jewell,

Am. J. Little

Charles S. Stickley

INVENTOR

by *H. P. Littell*
Attorney

(No Model.)

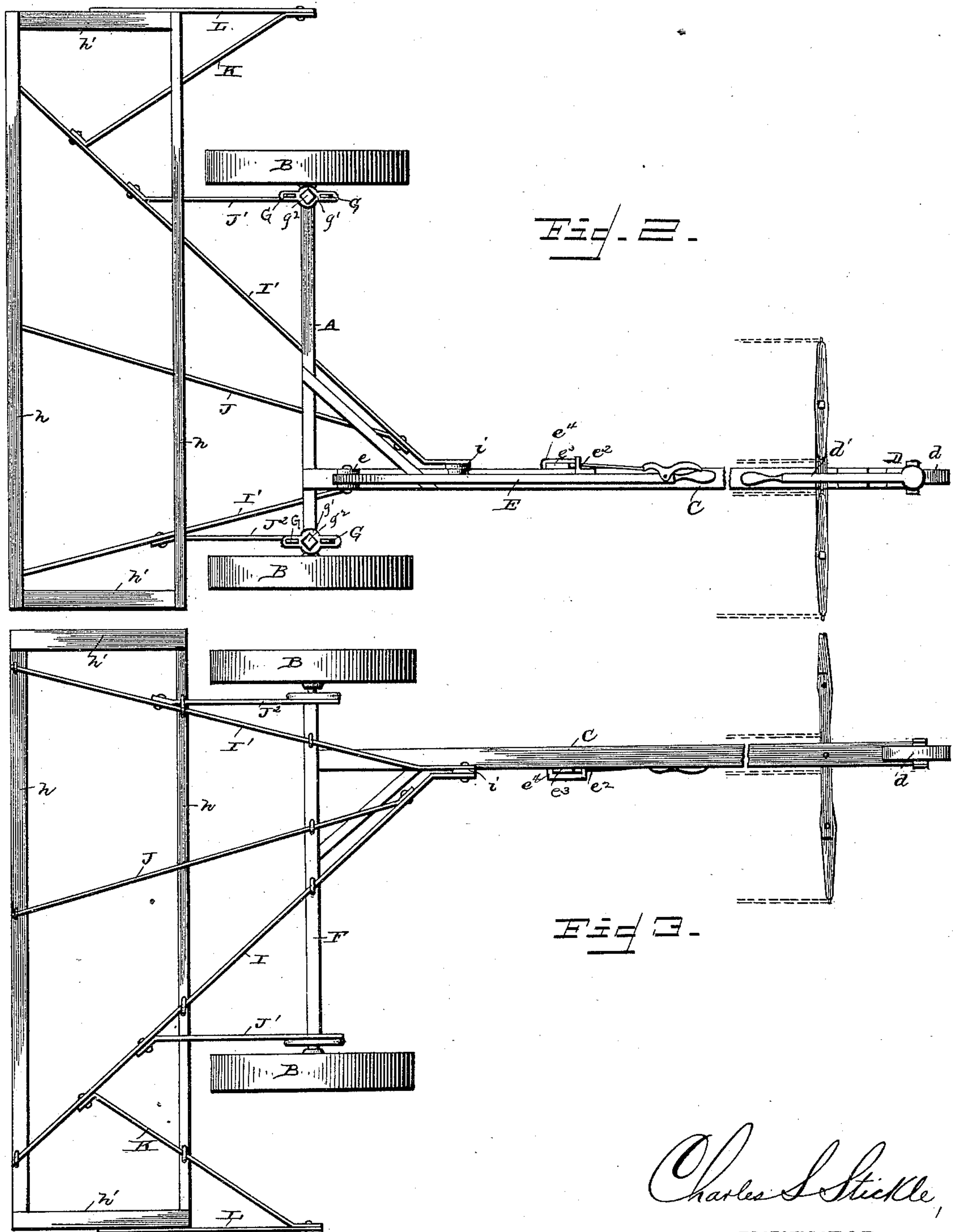
3 Sheets—Sheet 2.

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WITNESSES,

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(No Model.)

3 Sheets—Sheet 3.

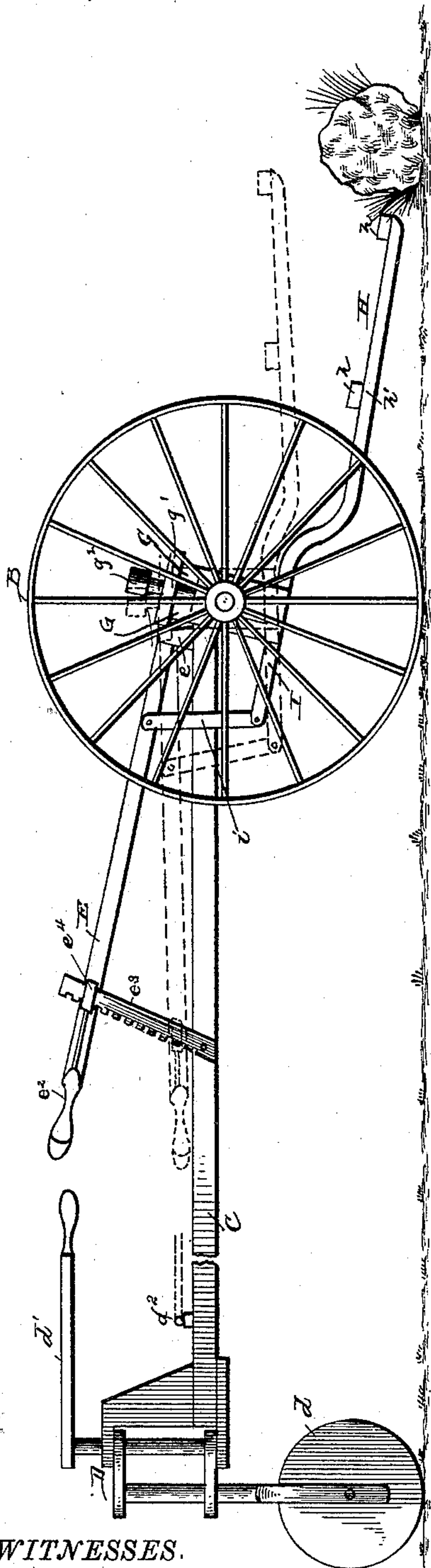
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Fig. 4.

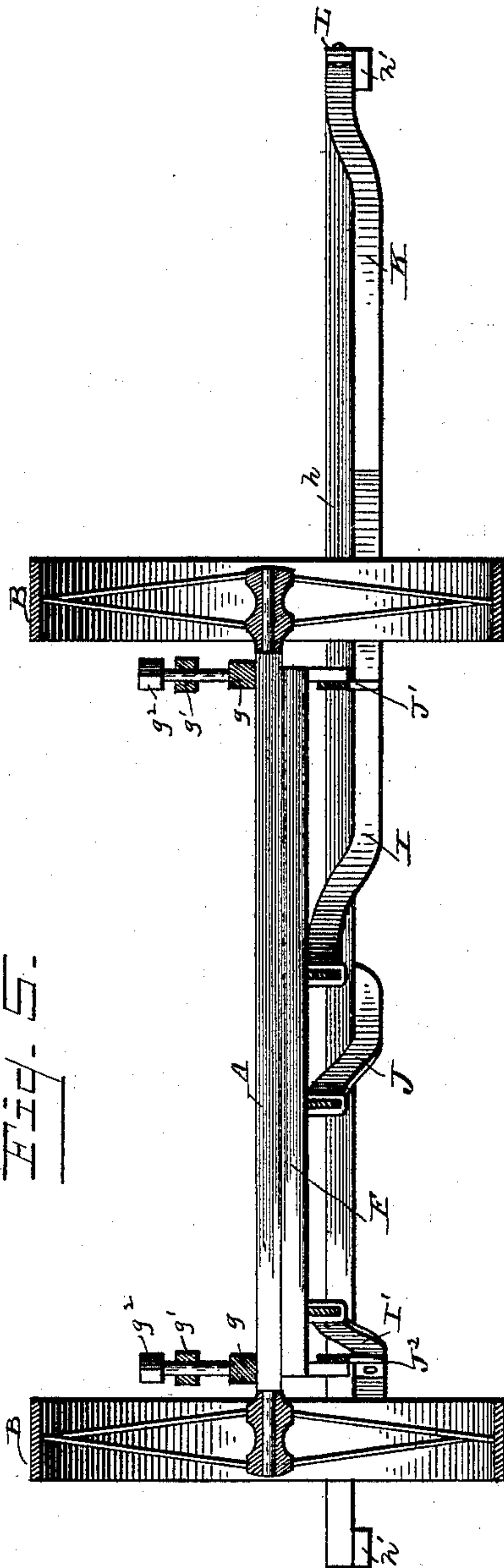


WITNESSES.

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Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES S. STICKLE, OF PEKIN, ILLINOIS.

HARVESTER.

SPECIFICATION forming part of Letters Patent No. 398,467, dated February 26, 1889.

Application filed June 26, 1888. Serial No. 278,274. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. STICKLE, a citizen of the United States, residing at Pekin, in the county of Tazewell and State of Illinois, have invented certain new and useful Improvements in Harvesters, of which the following is a specification.

This invention relates to harvesters of that class known as "headers," and its object is to provide an improved construction of frame which may be sufficiently elevated to run clear of all obstructions when the machine is in operation.

A further object of the invention is to provide a device of this character possessing advantages in point of inexpensiveness, durability, and general efficiency.

In the drawings, Figure 1 is a perspective view of a harvester-frame embodying my invention. Fig. 2 is a top or plan view. Fig. 3 is a bottom or inverted plan view. Fig. 4 is a side elevation, the operation being shown in dotted lines. Fig. 5 is a transverse vertical sectional view.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A designates the axle, upon the ends of which are mounted carrying-wheels B B. From the rear of the axle extends the tongue C, having at its end a pivoted standard, D, provided with a steering-wheel, d , at its lower bifurcated end, and with a steering-lever, d' , at its upper end. The rear end of the tongue is also provided with a doubletree, d^2 . From the top of the tongue, near the front portion thereof, projects a bifurcated lug, e , to which is pivoted one end of a lever, E, the purpose of which being hereinafter described. The lever is also preferably provided with a clutch-lever, e^2 , for operating a sliding bolt, e' , which engages a rack-bar, e^3 , secured to the tongue, to retain it in adjusted position. The rack-bar e^3 is preferably straight and pivotally secured to the tongue and embraced by a collar, e^4 , upon the lever; but in lieu of this construction a segmental rack-bar may be employed, if desired.

The present invention is designed as an improvement upon the construction for which Letters Patent were granted to me February 5, 1884, No. 293,202; and it consists, substan-

tially, in providing an improved construction of frame embodying connecting-bars curved downwardly in front of the axle in lieu of the bars therein employed, for the purpose hereinafter more fully described, and set forth in the claims.

In the above-mentioned patent the connecting-bars are curved downwardly in rear of the axle to the level of the forward part of the frame, and thus the transverse bar underlying the axle, and to which said connecting-bars are secured, is in substantially the same horizontal plane as the cutting apparatus and near the surface of the ground. In the present application this transverse bar lies closer to the axle and the forwardly-extending connecting-bars are curved downwardly in front of the frame, the advantages of such construction being hereinafter described.

F designates a transverse bar parallel with and disposed under the axle. At the ends of this bar are secured suitable adjusting devices embracing the ends of the axle, and by means of which said bar is vertically adjustable. The adjusting devices each comprise two parallel uprights secured at the ends of the bar F, between which pass the ends of the axle. Above the axle are disposed blocks g , the uprights G forming guides for the bifurcated ends thereof. The upper ends of the uprights are connected by cross-pieces g' , each of which is provided with a central screw-threaded perforation, through which is passed a bolt, g^2 , for adjusting the blocks to raise or lower the frame upon the axle.

H designates a rectangular frame carrying the cutter-bars and other mechanism (not shown) and comprising the front and rear parallel bars $h h$ and the end cross-bars, $h' h'$.

The frame H and bar F are connected by a series of bars formed of steel or any other suitable material, and which I will now proceed to describe.

I I' designate two rearwardly-converging bars secured at their forward ends to near the ends of the front bar h , while their rear ends project beyond the bar F, and pivoted between them is the lower end of a link, i , provided with a series of perforations, i' . This link is pivoted through one of the perforations to the lever E, permitting the elevation

of the rectangular frame by the operation of said lever. A bar, J, is secured nearly centrally upon the front bar *h*, and is secured at its other end to the bar I in rear of the transverse bar F.

J' J² designate two parallel bars secured, respectively, at their front ends to the bars I I' in front of the rear bar *h*, and at their rear ends to the lower ends of the uprights G of the adjusting devices. A bar, K, is secured to the outer side of the bar I between the main bars of the rectangular frame and diverges therefrom. This bar is connected at its rear end with the frame H by a bar, L.

The bars I, I', and J are rigidly secured to the bar F, preferably by staples, as shown.

For the effective operation of harvesters of this class it is necessary that the frame H should be in nearly a horizontal position. To accomplish this with straight connecting-bars as heretofore employed, the bar F must be disposed near the surface of the ground, and when so disposed great inconvenience is experienced by the said bar coming in contact with obstructions in the path of the machine. To obviate this difficulty, the connecting-bars herein shown are curved upwardly in rear of the frame H, and thence to a plane parallel with the front portions, but at a greater elevation. By this construction it will be seen that the bar F is at a greater distance from the ground than if the connecting-bars were straight, and, further, that when the lever E is operated and the frame elevated thereby the entire frame is sufficiently elevated to pass over all obstructions.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains.

As the machine approaches a rock or other obstruction, the lever E is depressed, elevating the frame H, and by reason of the curve in the connecting-bars the machine is permitted to pass over the obstruction, when it can again be adjusted to its former position. It will be obvious that the frame H can be adjusted at any desired angle and retained therein by the operation of the lever and the locking-pawl thereon, such operation being further facilitated by the adjustment of the link *i*.

I claim as my invention—

1. The combination of the axle, a tongue extending rearward therefrom, an adjustable

lever pivoted thereon, a bar disposed under the axle, a rectangular frame located in front of and below the bar, and connecting-bars secured to said frame and curved upwardly from the rear edge thereof in front of the axle and rigidly secured to the bar under the axle, the connecting-bars being extended in rear of the axle and connected with the adjusting-lever, substantially as set forth.

2. The combination, with an axle, a transverse vertically - adjustable bar disposed thereunder, a rearwardly-projecting tongue secured to the axle and carrying a lever, a rectangular frame located in front of and below the transverse bar, bars connecting the same with the bar under the axle, said connecting-bars being curved upwardly in front of the axle at the rear edge of said frame and being extended in rear of the axle, and a link provided with a series of perforations for adjustably connecting the latter with the lever, substantially as set forth.

3. The herein-described header, comprising the axle, a transverse bar, F, underlying the axle and having guides therefor at its ends, a rectangular frame, H, located in front of and below the transverse bar, the rearwardly-converging bars I I', the bar J, extending from the front beam of the rectangular frame to near the rear end of the bar I, the parallel bars J' and J², respectively secured to the bars I and I' at one end and to the guides at the ends of the transverse bar, and a bar, K, secured at one end to the bar I and at the other to the outer end of a bar, L, projecting rearwardly from the rear end of the rectangular frame, said connecting-bars being curved upwardly from the rear edge of the rectangular frame in front of the axle, all arranged substantially as and for the purpose set forth.

4. The herein-described header, comprising the axle, a transverse bar underlying the axle and having guides therefor at its ends, a rectangular frame, and bars connecting the latter with the transverse bar, said connecting-bars being curved upwardly at the rear edge of the rectangular frame in front of the axle, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES S. STICKLE.

Witnesses:

E. S. DODGE,

O. P. SHEPARDSON.