

No. 641,666.

Patented Jan. 23, 1900.

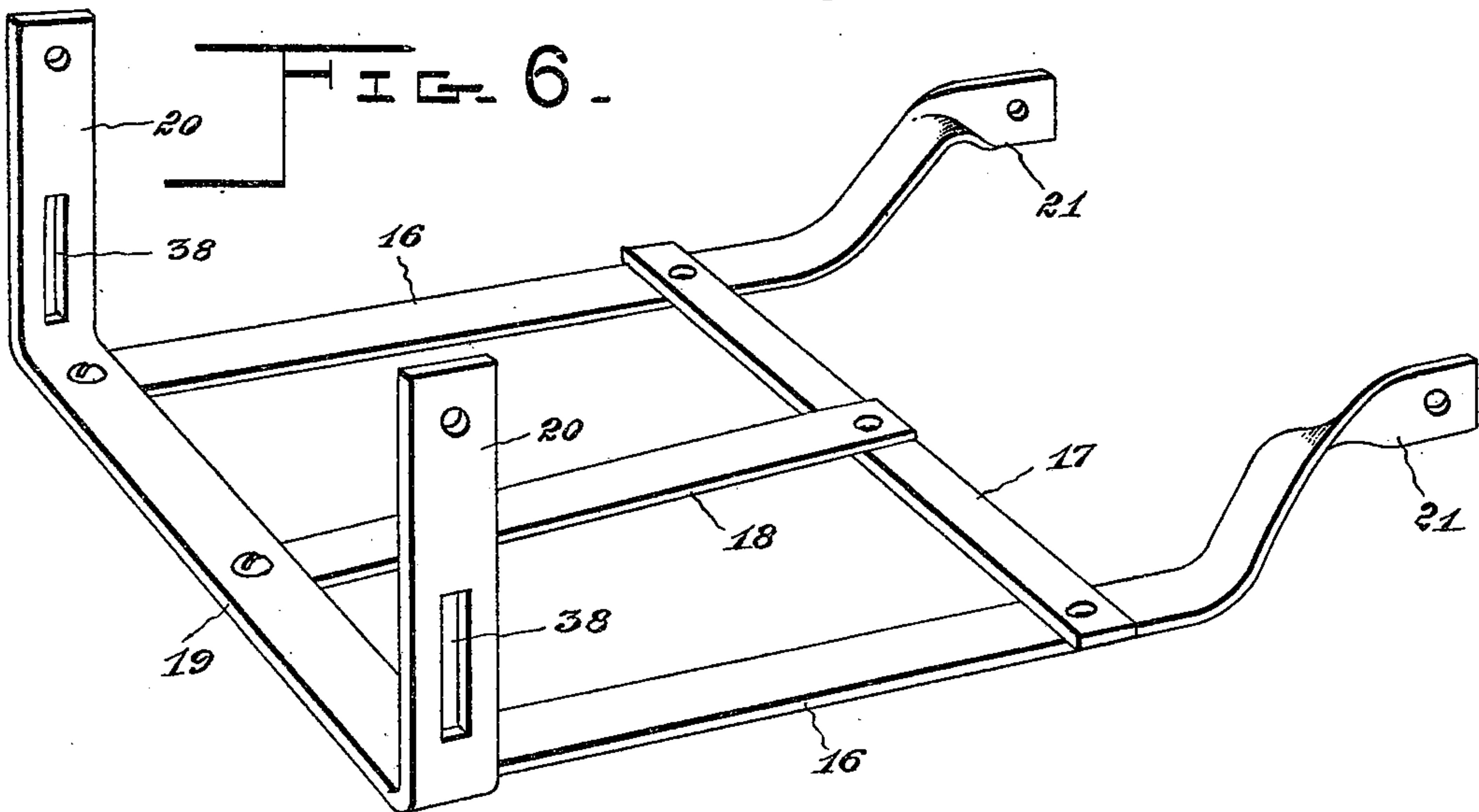
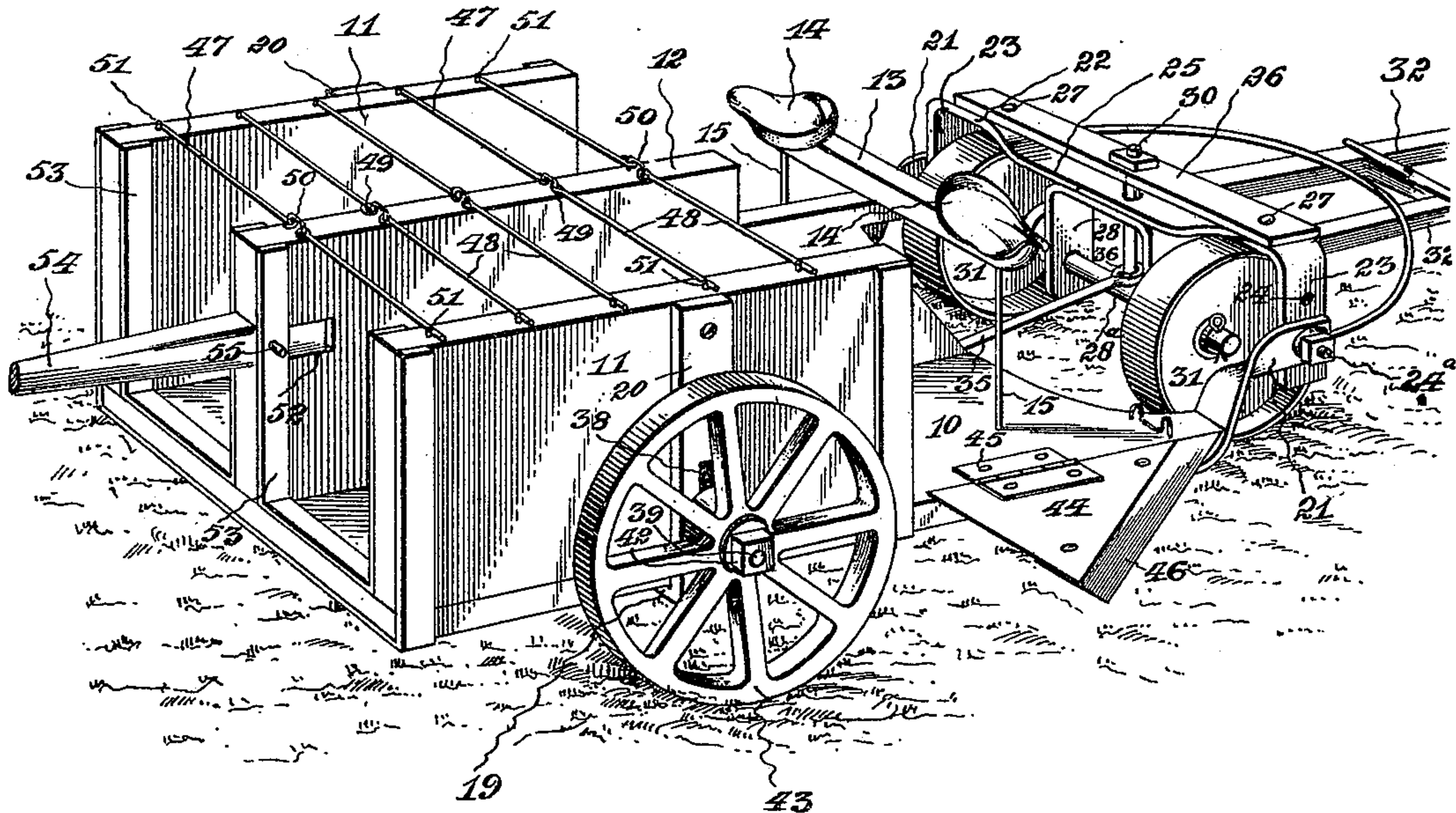
D. BAUGHMAN.  
CORN HARVESTER.

(Application filed Apr. 28, 1899.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.



Witnesses

John F. Deufferin  
H. J. Baughman

Daniel Baughman, Inventor

By his Attorneys,

C. A. Snow & Co.



No. 641,666.

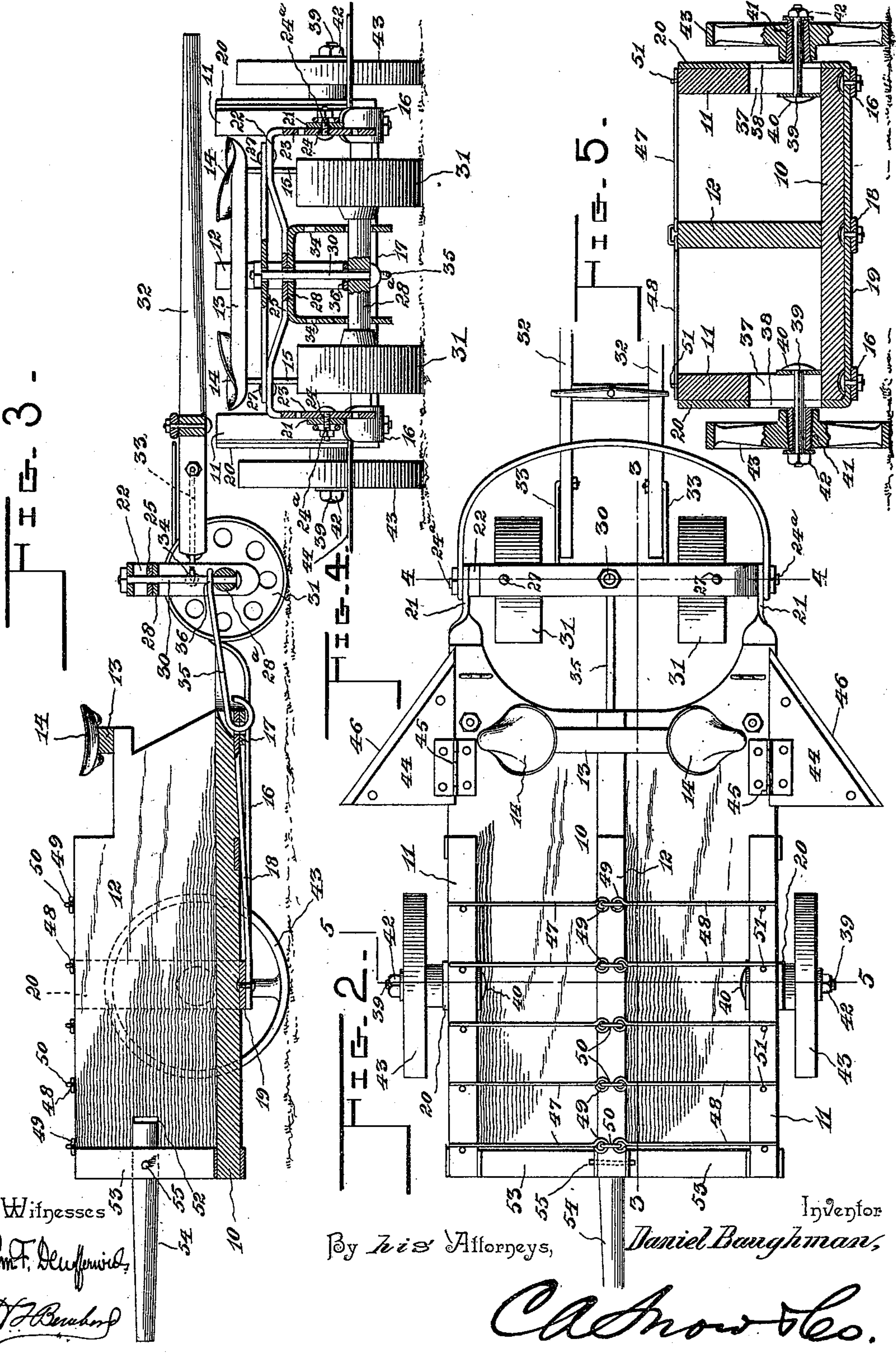
Patented Jan. 23, 1900.

D. BAUGHMAN.  
CORN HARVESTER.

(Application filed Apr. 28, 1899.)

(No Model.)

2 Sheets—Sheet 2.





# UNITED STATES PATENT OFFICE.

DANIEL BAUGHMAN, OF COLUMBUS GROVE, OHIO.

## CORN-HARVESTER.

SPECIFICATION forming part of Letters Patent No. 641,666, dated January 23, 1900.

Application filed April 28, 1899. Serial No. 714,843. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL BAUGHMAN, a citizen of the United States, residing at Columbus Grove, in the county of Putnam and State of Ohio, have invented a new and useful Corn-Harvester, of which the following is a specification.

My invention relates to improvements in corn-harvesters of that class wherein oppositely-inclined blades are used on the respective sides of a platform to cut the cornstalks on either or both sides of the machine; and the primary object is to provide a substantial simple construction of machine-frame adapted to be carried by wheels the spindles of which are vertically adjustable to support the platform and cutters at variable distances from the ground and particularly to enable the cutters to sever the stalks close down to the ground.

A further object is to provide a draft appliance for a single horse in which two carrying-wheels with broad treads are employed on a pivoted axle to support the front end of the machine in a level condition and to prevent said wheels from sinking into soft ground.

A further object is to simplify and strengthen the construction and arrange the parts in a manner which promotes convenience in the manipulation of the machine and facilitates the removal of the cornstalks for assemblage into a shock.

With these ends in view the invention consists in the novel combination of elements and in the construction and arrangement of parts, which will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a perspective view of a corn-harvester embodying my invention. Fig. 2 is a top plan view thereof. Fig. 3 is a longitudinal section on the line 3 3 of Fig. 2. Fig. 4 is a transverse section through the draft appliance on the line 4 4 of Fig. 2. Fig. 5 is a transverse section through the rear part of the machine and the side carrying-wheels, the plane of the section being indicated by the dotted line 5 5 of Fig. 2. Fig. 6 is a detail perspective view of the metallic skeleton frame with the various parts of the harvester detached therefrom.

The same numerals of reference are used

to indicate like and corresponding parts in each of the several figures of the drawings.

The harvester of my invention is provided with a horizontal platform 10, divided into longitudinal shock-racks by the side walls 11 and the central partition 12. The central partition extends throughout the length of the platform, while the side walls thereof terminate in rear of said front end of the platform to provide spaces which enable the operators to easily mount or dismount at the front sides of the machine. Said central partition is cut away or notched at its rear end to accommodate an elevated seat-bar 13, fixed to the partition 12, and this bar supports the seats 14, which are stayed from the platform by the rods 15. The entire platform is carried or supported by a skeleton metallic frame of the construction represented more clearly by Fig. 6. This skeleton frame consists of the side bars 16, a front cross-bar 17, a middle bar 18, arranged between the side bars, and a rear brace-bar 19, all of these parts being bolted or otherwise joined substantially together to produce a light and strong frame adapted to support the platform and its load. The rear brace-bar is bent to form the vertical arms 20, which are disposed outside of the walls 11, and said arms are fastened firmly to the walls. The side bars 16 are prolonged or extended beyond the front of the platform, and said prolonged ends are bent upward and twisted to form the hangers 21, said hangers being disposed in advance of and on a plane above the platform, which is fixed to the metallic frame in any suitable way.

The machine is equipped with a front arch 22, which has depending legs 23, provided with the transverse perforations 24, and the perforated ends of this arch are fitted within the twisted hangers 21, so as to overlap the latter. This assemblage of the front arch to the hangers brings certain openings 24 into registration with suitable apertures in the twisted hangers 21, and the front arch and the hangers are fastened together adjustably by transverse bolts 24<sup>a</sup>, whereby the front arch may be adjusted vertically on the hangers of the metallic frame. The front arch 22 is depressed between its legs, as at 25, to rest upon the draft-yoke 28, and the arch is reinforced



by a stay-plate 26, which is fitted to the upper side thereof and is riveted or otherwise secured in place, as at 27.

The draft-yoke 28 is disposed in a vertical position below the depressed part of the arch, and said yoke is provided at its lower end with transverse openings to receive the front axle 28<sup>a</sup>, the length of which is less than that of the arch, so that the axle is disposed between the legs of said arch. A king-bolt 30 passes through the stay-plate, the arch, the draft-yoke, and the axle, and said king-bolt serves to pivotally attach the axle and the draft-yoke to the vertically-adjustable arch 22 on the frame. The ends of the axle are prolonged through the draft-yoke to receive the pair of front wheels 31, each of which is provided with a broad tread, said wheels being disposed on opposite sides of the king-bolt in order to support the front end of the machine in a level condition and to minimize the tendency of the wheels to sink into soft ground.

My harvester is designed to be drawn by a single horse, and I therefore provide the thills 32, which are provided with draft-links 33, that are hooked into openings or draft-eyes 34 of the draft-yoke 28. The king-bolt is stayed by connection of a rod 35 to the front end of the metallic frame, one end of the stay being fastened to said frame in any suitable way, while its other end has an eye 36, fitted loosely on the king-bolt.

The side walls 11 of the platform are provided with vertical slots 37, which register with similar slots 38, that are formed in the vertical arms 20 of the rear bar 19, which constitutes a part of the metallic frame, and through these coincident slots pass the inner ends of the wheel-spindles 39. Each spindle is provided at its inner end with a head 40, arranged to bear against the inner face of one side wall 11, and on the protruding part of the spindle is fitted a sleeve 41 and a nut 42, said nut adapted to be adjusted for clamping the sleeve and head of the spindle against the wall 11 and the metallic arm 20, whereby the spindle may be held firmly in an adjusted position within the limits of the coincident slots 37 38. The spindles 39 support the carrying-wheels 43, which are disposed on opposite sides of the platform and are adjustable vertically with said spindles, and said wheels are held against displacement by the nuts 42, which, however, do not bind the wheel-hubs against the arms 20 of the frame, because the sleeves 41 take up the pressure of the nuts.

44 designate the carrying-plates for the blades or knives 46, and these plates are hinged at 45 to the sides of the platform 10 at the front end thereof. The plates have inclined edges, to which the blades 46 are fastened removably in any suitable way, and said blades are disposed in oppositely-inclined directions on the respective sides of the platform, so as to operate to cut two rows of cornstalks when the machine is drawn across the field. It is

evident that either plate 44 may be raised on its hinged connection with the platform to throw one or the other of the blades out of service.

The cornstalks as they are cut by the blades on the travel of the machine across the field are gathered by the attendants occupying the seats 14, and these stalks are stacked in the troughs provided between the walls 11 and partition 12. To separate the stalks, I employ two series of shock-fingers 47 48, which are loosely connected at their contiguous ends to the upper edge of the partition 12 and are adapted to rest on the side walls 11. The adjacent pair of shock-fingers are provided with eyes 49, that are loosely engaged with a staple 50, fixed to the partition 12, and the free ends of these fingers are confined against movement under the pressure of the stalks by means of stop-pins 51, which are secured to the walls 11, as clearly shown by Figs. 1 and 2. The loose attachment of the shock-fingers to the central partition is advantageous when removing the stalks from the platform, because the operator may stand on either side of the platform and lift the stalks out of the trough thereon. After the stalks have been removed from the platform between certain of the fingers the latter may be thrown to one side and out of the way of the other stalks as they are removed successively from the platform, but the fingers being loosely connected to the staples on the middle partition said fingers are not detached or mislaid.

I have equipped the machine with means by which the stalks may be easily formed into a shock. Said means consists of a shock-pole 54, having a squared end fitted in a socket 52, which is formed in the rear end of the central partition 12, and this pole is held in place against lateral displacement by bands 53, which are fastened to the platform and the walls thereof, so as to stay the walls as well as close the sides of the socket 52. A fastening-pin 55 may be passed through apertures in the stay-bands and the shock-pole to hold the latter detachably in place on the machine, and this shock-pole is adapted to extend rearwardly from the platform when it is applied to the machine. To stack the stalks into a shock, the team and machine are stopped, and the stalks are stacked around the pole, which remains attached to the machine. The pole forms a central support around which the stalks may be placed to form the shock, which is bound together in any suitable way, and then the pole is withdrawn from the shock by driving the team ahead to renew the operation of harvesting the corn, the shock being left standing in the field. The shock-pole may be easily removed when the machine is not in use.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sac-



rificing any of the advantages of this invention.

Having thus described the invention, what I claim is--

- 5 1. A corn-harvester comprising a skeleton frame having the cross-bars, 17, 19, united to the longitudinal bars, 16, 18, said bars, 16, being prolonged and twisted at the front ends into the hangers, 21, a platform secured on  
10 the skeleton frame and having the side walls fastened to vertical extensions of the cross-bar, 19, a bolster fastened to the hangers of the bars, 16, in advance of the platform, a draft-yoke provided with openings, 34, draft-  
15 links fitted in said openings, a king-bolt, a stay-rod, 35, connected to the frame cross-bar, 17, and to the king-bolt, and carrying-wheels mounted in the draft-yoke and on the

metallic frame, respectively, substantially as described.

- 20 2. The combination of the platform, the side and middle walls fixed to the platform and said middle wall having the rearwardly-opening socket in its rear edge, a shock-pole fitted removably in said socket, and a fas- 25  
tener fitted in the wall and the pole to hold the latter removably in place, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature 30  
in the presence of two witnesses.

DANIEL BAUGHMAN.

Witnesses:

JOHN CAFFERTY,  
S. SANDERS.