(No Model.)

C. STUCKE.

HARVESTER ATTACHMENT.

No. 538,935. Patented May 7, 1895.

Fig. 1.

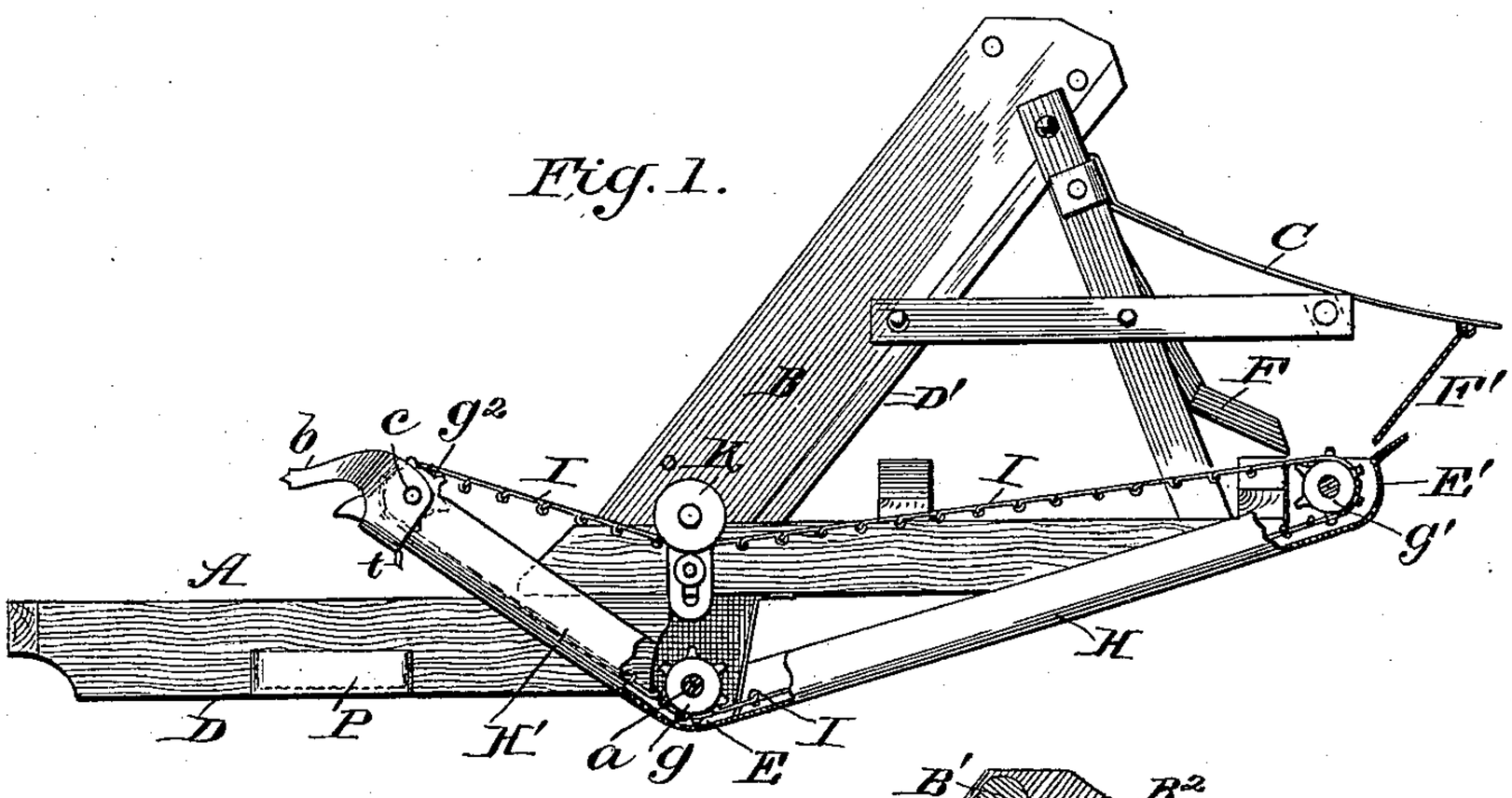


Fig. 4.

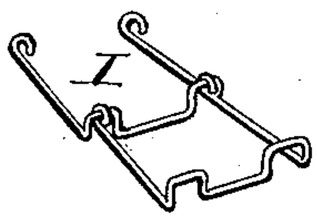
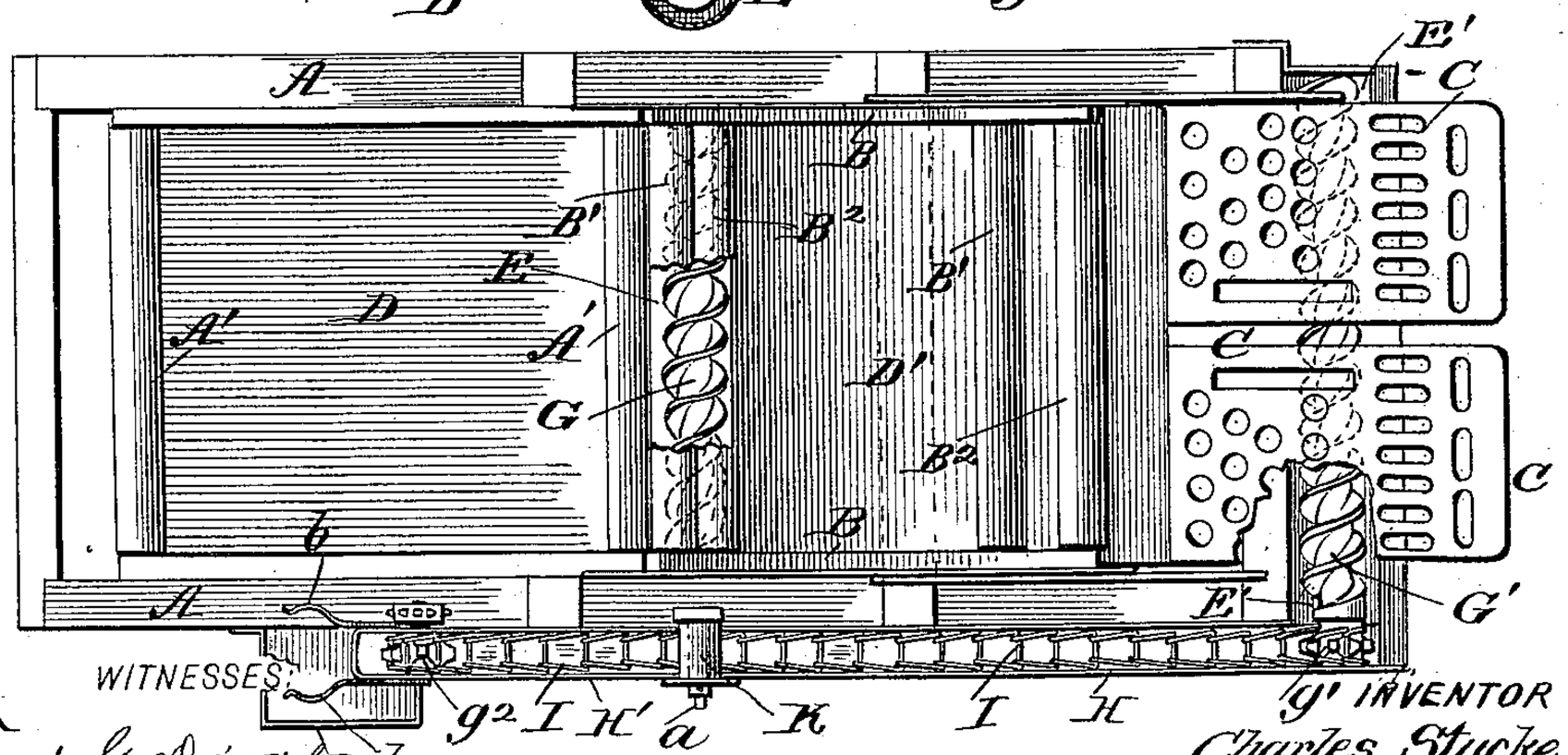


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES STUCKE, OF APPLETON, ASSIGNOR OF THREE-FOURTHS TO LOUIS ABRAHAM, HERMAN ABRAHAM, AND HENRY ABRAHAM, OF LAKE BENTON, MINNESOTA.

HARVESTER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 538,935, dated May 7, 1895.

Application filed October 29, 1894. Serial No. 527,202. (No model.)

To all whom it may concern:

Be it known that I, CHARLES STUCKE, of Appleton, in the county of Swift and State of Minnesota, have invented a new and useful Improvement in Harvester Attachments, of which the following is a specification.

My invention is in the nature of an attachment to harvesters for harvesting grain whose object is to save the shelled grain which may become incidentally thrashed out in the operation of cutting, elevating, and binding it into sheaves, and which ordinarily falls to the ground and is wasted.

My invention consists in gathering pans or screens underlying the platform and elevator aprons and the binding table, in combination with troughs, spiral conveyers, and elevator chain, which gather this shelled grain (or heads) as it falls out and conveys it to a bagging device where it is gathered and saved, as will be hereinafter more fully described.

Figure 1 is a side elevation of the platform, elevator, and binding-table of a harvester with my attachment applied thereto. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a plan view with parts broken away, and Fig. 4 is a detail of the elevator-chain.

In the drawings, A represents the platform frame in which are carried the rollers A′ A′ for the apron, and B is the inclined frame having two sets of rollers B′ B′ and B^2 B^2 for the two aprons, up and between which the grain in the straw is carried to the binder table C. Beneath the platform apron is a subjacent gathering pan or screen D, and beneath the elevator aprons is another subjacent pan or screen D′, which two pans receive the grain that may be shelled or thrashed out in handling, and convey it to a trough E placed at the point of convergence of these two pans.

The binding table is perforated with holes of different size and shape to permit the shelled grain that is dislodged from the straw on the binding table to fall through it. To save this grain, an inclined detachable and adjustable chute or pan F is secured beneath this table and runs to a trough E′ at the outer end of the machine, while a leaf F′ is hinged to the outer end of the binding table and extends inwardly to the trough E′ so as to cooperate with the chute F in leading all the shelled grain, that falls from the binding table, into said trough. In each of these two troughs E and E′ there is placed a spiral conveyer G and G′ which feed the grain with a slow but constant motion into an outside trunk or casing H in which travels continuously an elevator chain I. This elevator chain passes around a sprocket wheel *g* and *g′* fixed upon the shafts of each of the spiral conveyers, and also passes over a sprocket wheel g^2 in the upper end of an elevator trunk H′, which is made vertically adjustable about a pin *a*. This elevator trunk H′ has a bag holder at its upper end consisting of two self adjusting and curved spring arms *b b*, upon which a bag is suspended, which arms are formed in one piece with a projecting tongue *t* that lies against the lower side of the elevator trunk, said bag holder being pivotally connected to the elevator trunk at *c* so as to adjust itself in filling the bag, and being also made detachable from the elevator trunk by springing its sides over the ends of the axial pin *c*. To support and steady the lower part of the bag a pan or box P is attached to the platform beneath the bag holder, and forms a seat for the bag and also a receptacle for empty bags.

K is an adjustable chain tightener wheel, which runs upon the upper side of the elevator chain, and holds it taut and free from shaking about.

Motion may be imparted to the spiral conveyers and their sprocket wheels from any one of the apron shafts or rollers of the machine, but I prefer to drive the elevator chain from one of these rollers and cause the elevator chain to impart the requisite movement to the spiral conveyers.

The chain does not need to have any buckets or cups on it, but simply has its links made in a peculiar shape, as seen in Fig. 4, its cross members being bent so as to lie flat against the bottom of the conduit, and thus carry the grain along.

In saving the grain on the binding table, it is important that the whole surface of the binding table should be full of holes and preferably of various sizes and shapes, to let the

loose grain pass through, for otherwise the grain would be swept off the table by the sheaf and lost.

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

1. The combination of the horizontal pan or screen D and inclined pan or screen D′, the trough E with spiral conveyer arranged at the junction of these two pans or screens, a gathering trough and spiral conveyer arranged beneath the binding table, an outside trunk or casing H and H′ arranged at the rear of the machine to receive the grain from said trough and provided with a bag holder at its upper end, sprocket wheels g g' g^2, and the carrying chain belt I arranged to pass around said sprocket wheels and to carry the grain in the trunk up to the bag holder substantially as and for the purpose described.

2. The combination with a harvester; of pans or chutes arranged beneath the carrying aprons and binding table to receive the dropping grain, two troughs with spiral conveyers arranged the one at the junction of the carrying aprons, and the other beneath the binding table, and an elevator with trunk and chain arranged in rear of the harvester to receive the grain from the conveyers substantially as and for the purpose described.

CHARLES STUCKE.

Witnesses:
S. H. JOHNSON,
LORIN HART.