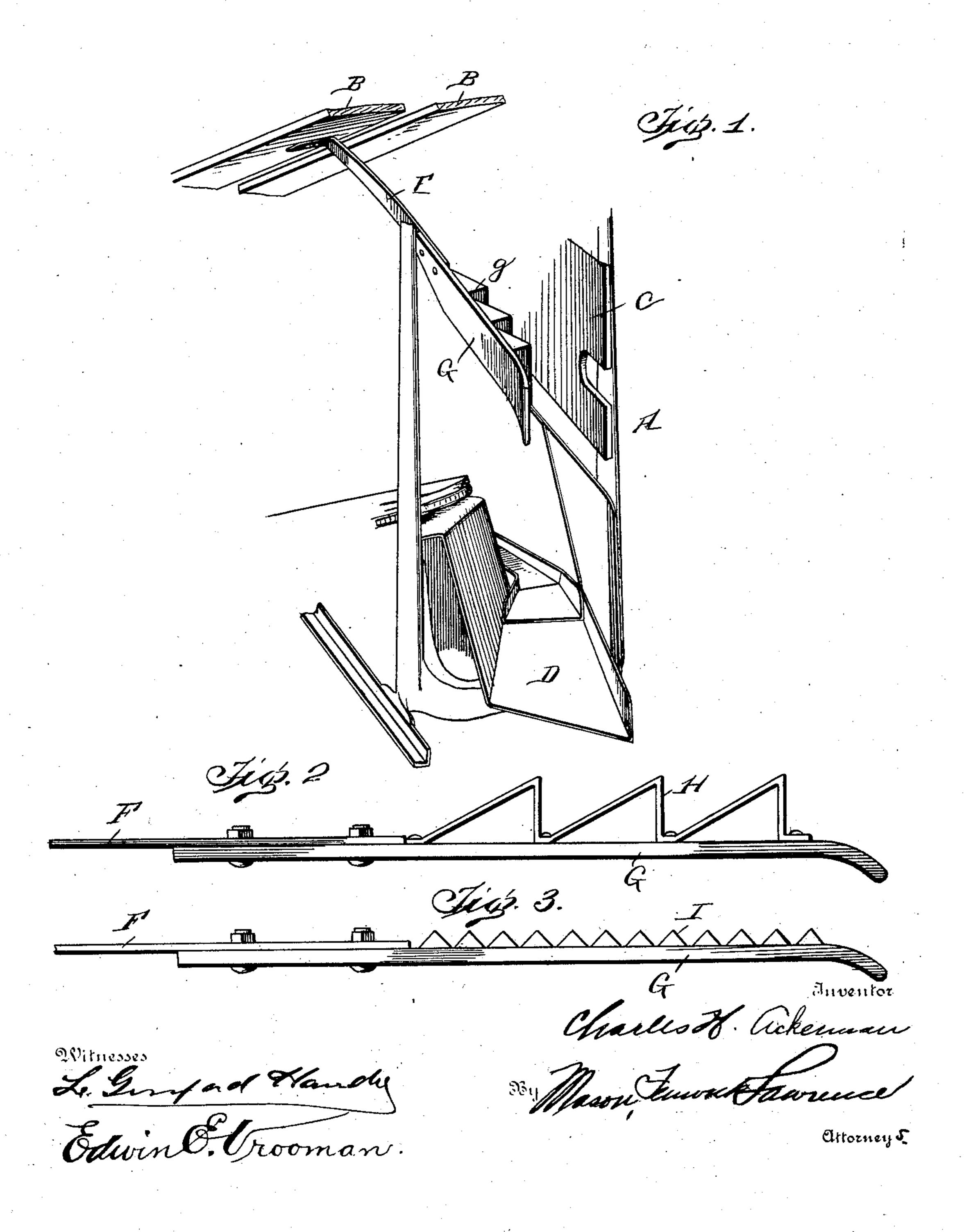
### C. H. ACKERMAN.

## SPRING EXTENSION FOR CORN BINDERS.

APPLICATION FILED DEC. 2, 1903.

NO MODEL.



# United States Patent Office.

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### SPRING EXTENSION FOR CORN-BINDERS.

SPECIFICATION forming part of Letters Patent No. 762,795, dated June 14, 1904.

Application filed December 2, 1903. Serial No. 183.507. (No model.)

To all whom it may concern:

Be it known that I, Charles H. Ackerman, a citizen of the United States, residing at Oshkosh, in the county of Winnebago and State of Wisconsin, have invented new and useful Improvements in Spring Extensions for Corn-Binders, of which the following is a specification.

My invention relates to improvements in vertical corn-harvesters, and to that class of corn-harvesters that conduct and maintain the cornstalks in a perpendicular position; and it consists, essentially, of a spring and a broadened extension adapted to press and confine the lower portion of the stalks against the deck of the machine.

The object of my invention is to facilitate the gathering and binding of the cornstalks to prevent the butts of the stalks from scattering and to keep them in alinement.

Another object of the invention is to provide a guide attached to one of the elevator-beds having a plurality of angular extensions projecting in a horizontal plane therefrom for the purpose of assisting in the guiding and compressing of the stalks against the deck of a harvester.

With these and other objects in view the invention consists in the novel construction, combination, and arrangement of parts, as will be hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the claims hereto appended.

In the drawings, Figure 1 is a fragmentary perspective view of a corn-harvester, showing my invention applied thereto. Fig. 2 is a plan view of the throat-spring or guide of the present invention. Fig. 3 is a similar view showing a different manner of making the teeth of the throat-spring.

Similar letters refer to similar parts in each view.

A represents a portion of a corn-harvester; B, the elevators; C, the deck, and D the floor, which is adapted to support the stalks.

F represents a throat-spring or guide, to which is attached a broadened extension G, extending across the throat of the deck and

F, the spring being attached at its opposite end to the under side of one of the elevator-beds B. The extension G is preferably corrugated vertically upon the side toward the deck C, as g, (shown in Fig. 1,) to render its 55 engaging surface more confining to the stalks as it presses them against the deck.

In Fig. 1 the corrugations formed upon the broadened portion G are shown as constructed from a solid piece of material, while in Fig. 60 2 the throat-spring F is provided with the broadened extension and to which is secured a corrugated metallic plate H, which is provided with a plurality of extensions extending at different angles from said broad por- 65 tion G of the said throat-spring F.

In Fig. 3 instead of employing the corrugations, as is shown in Fig. 2, I form a plurality of teeth I, which can either be constructed from a single piece of metal or formed 70 from a solid block and attached to said broadened portion G of the said throat-spring. If it is desired, it is obvious that the said teeth I can be formed integral with the broadened portion G of the throat-spring F.

As the stalks are elevated and carried into position for binding the lower ends of the stalks are forced between the extension G and the deck C and retained in a compressed position standing upon the floor D until they are 80 properly bound. The object of my invention is thereby effected.

It is obvious that the corrugations shown may vary in size and form to properly effect the object stated.

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

1. A throat-spring comprising a flexible portion, a broadened portion secured thereto, and 90 corrugations formed upon said broadened portion.

2. In a device of the character described, the combination with the elevators, frame, deck, and floor, of a throat-spring suitably attached 95 at one end to the frame of the machine and connected with a broadened extension at its opposite end which rests normally across the

front of the deck and is adapted to receive and engage the stalks between the deck and its inner surface.

3. In a corn-harvester, the combination with the elevators, frame, deck and floor, of a throat-spring suitably attached at one end to the frame of the machine, said spring carrying a broadened extension at its opposite end which rests normally across the throat of the deck and is adapted to receive and engage the stalks between the deck and its inner surface, and corrugations formed upon the inner surface of said broadened extension.

4. In a corn-harvester, the combination with elevator-beds, the deck and floor, of flexible means secured to said elevator-beds and extending in a parallel position to said deck and

provided with a roughened surface.

5. In a device of the character described, the combination with elevator-beds, the deck and floor, of means carried by said elevator-beds and extending toward the rear portion of the machine, and said means provided with ribbed means adapted to normally press against the deck of the machine.

6. In a harvesting-machine, the combination with the elevator-beds, deck and floor of a guiding member secured to one of said elevator-

beds and extending parallel to said deck, said member comprising yielding means, compara- 3° tively broad rigid means assembled with said yielding means, and said rigid means provided with a roughened surface.

7. In a harvesting-machine, the combination with the elevator-beds, floor and deck, of guid-35 ing means projecting from said elevator-beds toward said deck, comprising yielding means, comparatively broad rigid means extending from said yielding means, and corrugations

formed upon said rigid means.

8. In a harvesting-machine, the combination with the elevator-beds, floor and deck, of a guiding member secured to one of said elevator-beds and extending at an angle thereto, said member comprising a narrow body portion, an extended broadened portion secured thereto, and a plurality of projections assembled with said broadened portion upon one side thereof.

In testimony whereof I have hereunto set my 50 hand in the presence of two subscribing witnesses.

#### CHARLES H. ACKERMAN.

Witnesses:

A. R. WATERHOUSE, L. M. FULLEY.