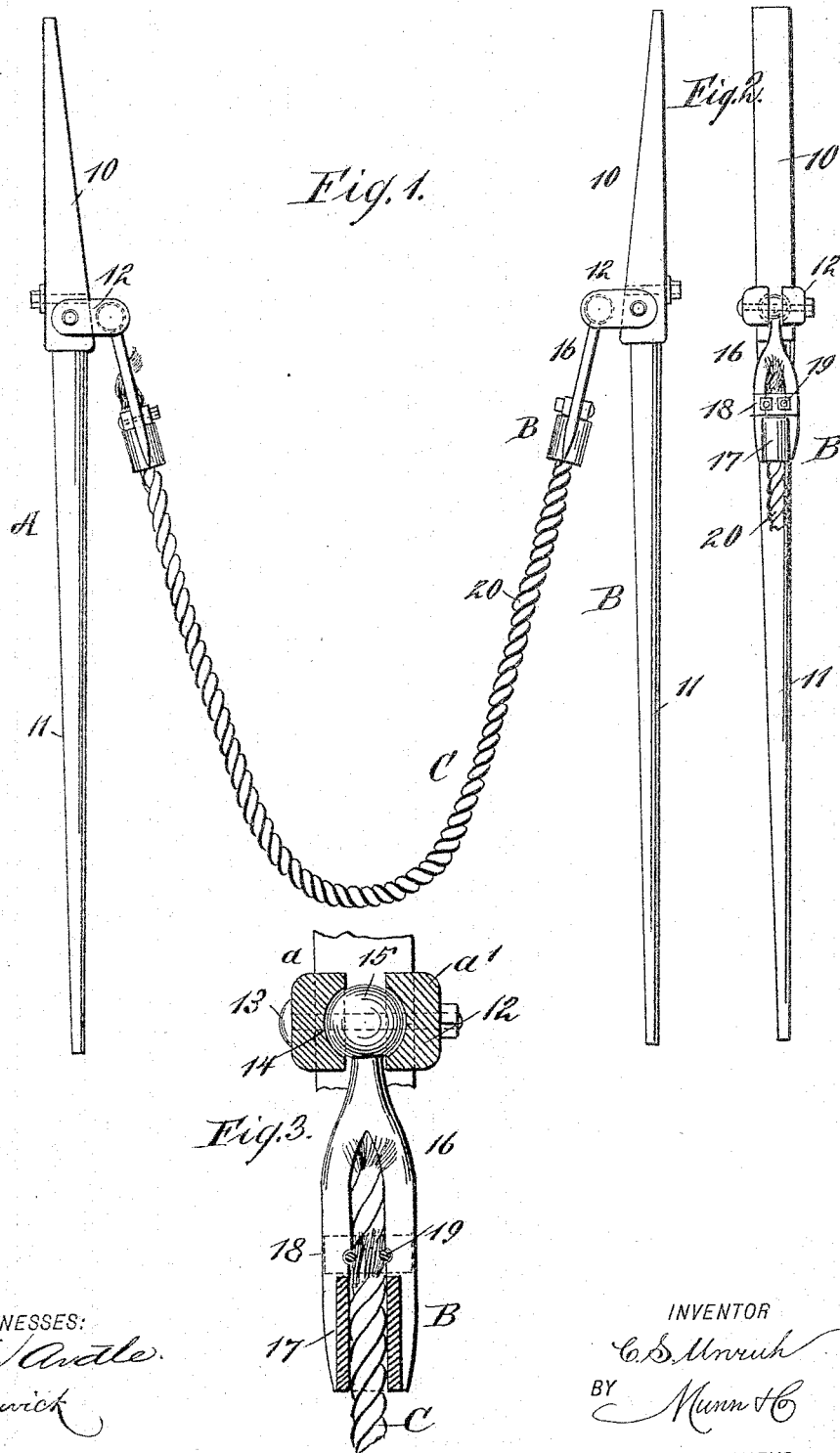


(No Model.)

C. S. UNRUH.
SHOCK BINDER.

No. 491,391.

Patented Feb. 7, 1893.



WITNESSES:
J. M. Andle
C. Sedgwick

INVENTOR
C. S. Unruh
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES S. UNRUH, OF STEELE CITY, NEBRASKA.

SHOCK-BINDER.

SPECIFICATION forming part of Letters Patent No. 491,391, dated February 7, 1893.

Application filed October 25, 1892. Serial No. 449,936. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. UNRUH, of Steele City, in the county of Jefferson and State of Nebraska, have invented a new and
5 Improved Shock-Binder, of which the following is a full, clear, and exact description.

My invention relates to a shock binder adapted for binding in an expeditious and convenient manner the upper part of corn
10 shocks in order that they may be readily tied.

The object of the invention is to provide a device which will be exceedingly simple in its character and also economic, and which may be operated by one or by two men with good
15 results, and further to so construct the device that the binding section may be lengthened or shortened as occasion may demand, and further, wherein in the manipulation of the device the binding section will not become
20 entangled or unduly twisted.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

25 Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

30 Figure 1 is a side elevation of the device; Fig. 2 is an inner side view of one of the levers and one of the clips attached to the lever, the binding section being broken away; and Fig. 3 is a section through the clip and the
35 socket of one of the levers.

In carrying out the invention two levers A and B, are employed. The lower portions 10 of the levers are preferably made tapering, whereby their lower extremities are pointed,
40 and the handle portions 11 of the levers are ordinarily made tapering and round in cross section, the lower portions 10 being preferably somewhat rectangular in cross section; the levers are thickest where the rectangular or
45 foot portion and the circular or handle portion of the levers connect, and upon the thick portion of each lever a socket 12, is securely fastened, the sockets facing inward. Each socket comprises two sections *a* and *a'*, as best
50 shown in Fig. 3, the sections being attached by means of a bolt 13, or its equivalent, to opposite sides of the lever. Each socket upon

its inner face near its outer end is provided with a semi-circular recess 14, and as the members of the sockets are arranged opposite each other the two semi-circular recesses 14 combinedly form a circular recess, and the circular recess of each socket receives a ball 15,
55 formed upon the shank 16 of a clip B. The body 17 of the clip is of tubular construction, 60 and the shank 16 is bifurcated just above the body, being shaped practically as an inverted Y with the ball 15 at the extremity of the straight branch. The shank emanates from the central portion of the body; and immediately above the body of the clip each side face
65 of the shank is engaged by a tie-plate 18, the two tie plates being connected and drawn in close engagement with the shank by means of bolts 19, provided with suitable nuts. 70

The binding section C of the device consists preferably of a rope 20, but the equivalent thereof may be employed. The ends of the rope are passed through the tubular bodies of the clips upward into the spaces within the
75 shanks of the clips, and a binding engagement is effected between the clips and the rope by tightening the plates 18, so that they are brought in close frictional engagement with opposite sides of the rope. It is therefore evident that by loosening the bolts 19, the binding section C may be made longer or shorter as occasion may demand; and it is further
80 evident that by reason of the ball and socket connection between the clips and the levers 85 the latter may be carried in almost any direction without twisting or unduly kinking the rope 20.

When the device is to be operated by two men, each man takes hold of the handle of
90 one of the levers and places the short end in a forwardly direction, one man standing at each side of the shock to be bound, which will cause the rope 20 to engage with one side face of the shock, the rope being brought in engagement with the shock where it is to be tied;
95 the men then walk toward each other until they meet, at which time they exchange levers, and by pressing the levers in opposite directions, the rope 20 will be twisted around
100 the shock so tightly as to draw the stalks in the closest possible engagement with each other. The shock is then tied above the rope preferably by means of a piece of binding

twine, and as the circumference of the shock at the point where it is to be tied will be very small, great economy in the use of said twine is obtained.

- 5 When the device is to be operated by one man, the operator places one of the levers against the shock and lifting the other lever walks around the shock until the lever at rest is reached; both levers are then forced in op-
10 posite directions, whereupon the shock will be compressed sufficiently to enable the one who ties the bundle to apply the twine. When shocks are thus compressed and tied they remain upright, are slightly, do not fall apart
15 and may be lifted by means of a fork in the hands of the most careless operator without danger of separation occurring.

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

1. A device for compressing shocks, the same consisting of two levers, clips having universal connection with the levers, and a yielding binding section, as rope, attached to the clips

and connecting them, substantially as shown 25 and described.

2. A device for compressing shocks, the same consisting of two levers, clips having a ball and socket connection one with each lever, and a rope adjustably held at its end portions 30 in the clips, as and for the purpose set forth.

3. A device for compressing shocks, the same consisting of two levers, sockets attached one to each lever, clips attached to the sockets, each clip comprising a tubular body, a shank 35 connected with the body and provided with an opening communicating with the interior of the body, and a ball formed at one end of said shank, loosely mounted in the clip with which it is to be connected, of a flexible bind- 40 ing section, as a rope, having its ends adjustably secured in the clip, and clamping devices connected with the clips and engaging with the rope, as and for the purpose specified.

CHARLES S. UNRUH.

Witnesses:

A. L. BUTTON,
FRANK BRYANT.