

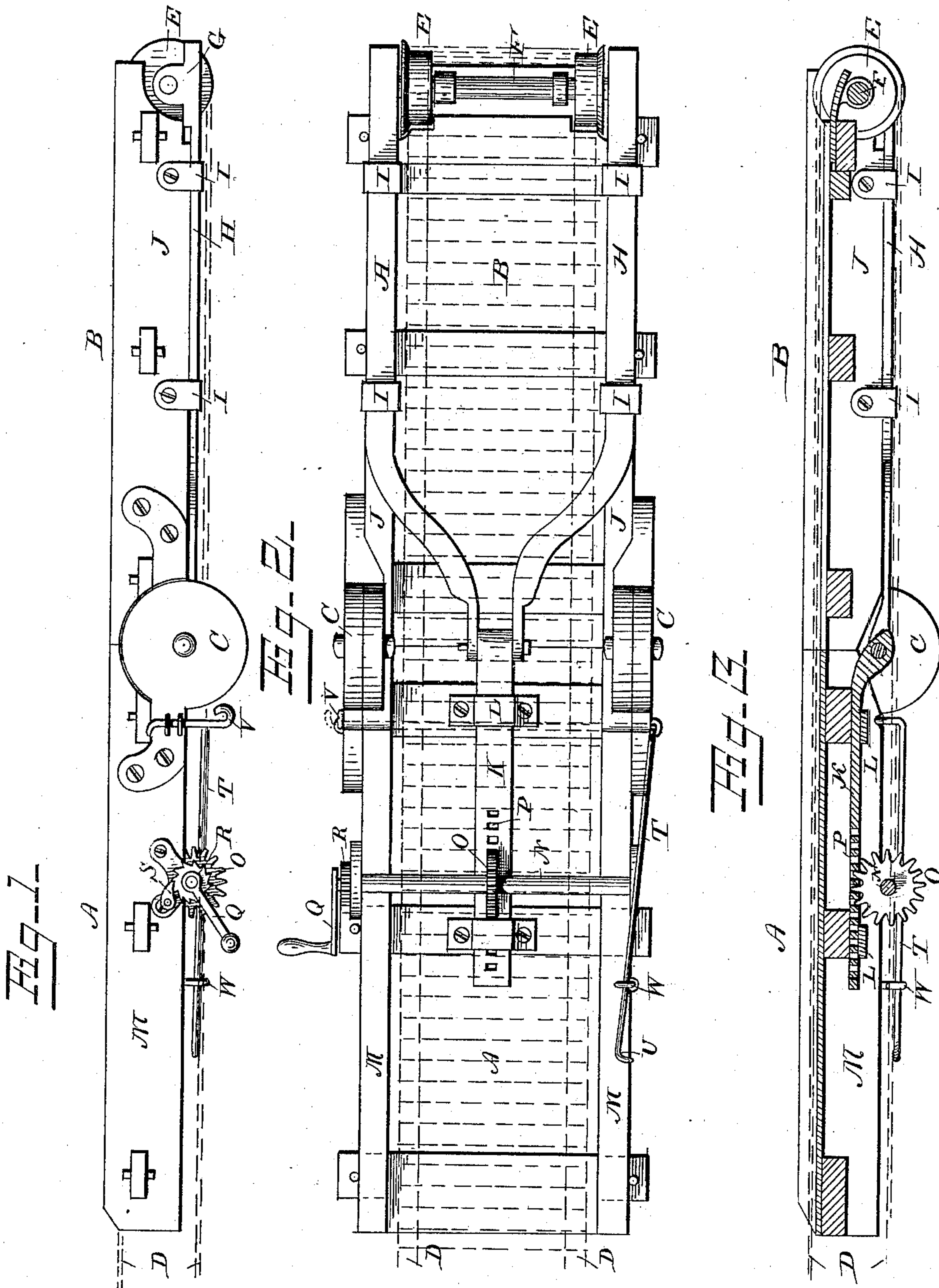
(No Model.)

F. F. HARTWICH.

STRAW STACKER.

No. 277,720.

Patented May 15, 1883.



WITNESSES  
*F. L. Ourand*  
*J. R. Little*

INVENTOR  
*F. F. Hartwich*  
by *W. Snow & Co.*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

FERDNAND F. HARTWICH, OF ONAGA, KANSAS.

## STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 277,720, dated May 15, 1883.

Application filed March 12, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, FERDNAND F. HARTWICH, a citizen of the United States, residing at Onaga, in the county of Pottawatomie and State of Kansas, have invented a new and useful Straw-Stacker, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to straw-stackers for thrashing-machines; and it has for its objects, first, to provide means for tightening or slackening the belts while the machine is running without stopping the same; second, to provide means which enable the stacker to be folded when the machine is to be moved without first detaching the belts or apron.

My invention consists in the improved construction and arrangement of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a side view of my improved straw-stacker. Fig. 2 is a bottom view of the same, and Fig. 3 is a longitudinal vertical sectional view.

The same letters refer to the same parts in all the figures.

The frame of my improved straw-stacker consists of the two parts or sections A and B, which are connected by hinges C, so as to be capable of being folded in the usual manner. The lower section, A, may be hinged upon the shaft of the thrashing-machine, which carries the lower band-wheels, upon which the apron or the belts D of the same are arranged to run. The upper band-wheels, E E, are mounted upon a shaft, F, the ends of which are journaled in boxes G at the upper ends of a pair of rods or straps, H, which are fitted to slide in stirrups or brackets I upon the under sides of the side pieces J of the upper section, B, of the stacker-frame. The lower ends of the straps H are bent inward and hinged by a transverse pin to a bar, K, sliding in stirrups or hangers L, centrally under the lower section, A, of the stacker-frame. The side pieces M M of the said lower section have bearings for a transverse shaft, N, carrying a pinion, O, engaging slots or openings P in the bar K. The end of shaft N has an operating-crank, Q, and it carries a ratchet-

wheel, R, engaging a pawl, S, which serves to hold the shaft in any position to which it may be turned.

It will be seen that when the stacker-frame is extended the frame comprising the parts H H K and the shaft F, and carrying the upper band-wheels, may be slid or moved up or down upon the stacker-frame, thus loosening or tightening the belts, as may be required, and this may be conveniently done at any time during the operation of the machine. The parts H H and K being hinged together, as shown, will not interfere with the folding of the stacker-frame.

T is a rod swiveled to one side of the stacker-frame, just below the hinge, and having at its free end a hook, U, which may engage a catch, V, at the opposite side of the frame. When the frame is to be folded for transportation the said rod retains the apron in its proper position, making it unnecessary to remove the said apron before folding the stacker. During the operation of the device the rod T is disengaged from the catch V and held by a similar catch, W, near the lower end of the stacker-frame, so as to be out of the way of the apron.

I claim as my invention and desire to secure by Letters Patent of the United States—

1. In a straw-stacker for thrashing-machines, the combination, with the frame composed of two parts or sections, hinged together as shown, of the straps sliding under the side pieces of the upper section, and carrying at their upper ends a shaft having the upper band-wheels, and having their lower ends bent inward, a bar hinged between the said lower ends, and mechanism for sliding the said bar upwardly and downwardly and for retaining it in any position to which it may be adjusted, as set forth.

2. The combination of the folding stacker-frame, consisting of the sections A B, hinged together as shown, the straps H, sliding in stirrups I under the sides of the upper section, B, and having their lower ends turned inward, the bar K, sliding in stirrups L, centrally under the lower section, A, and hinged between the lower ends of the straps H, the shaft N, pinion O, engaging slots P in the bar K, crank

Q, ratchet-wheel R, and the pawl S, all arranged and operating substantially as set forth.

3. In a straw-stacker for thrashing-machines, the combination, with the folding stacker-  
5 frame, of the rod T, swiveled below the hinge, and having a hook at its free end, and the catches V W, as and for the purpose set forth.

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

FERDNAND FRIDRICH HARTWICH.

Witnesses:

FRANK B. LANDON,  
M. F. HARTWICH.