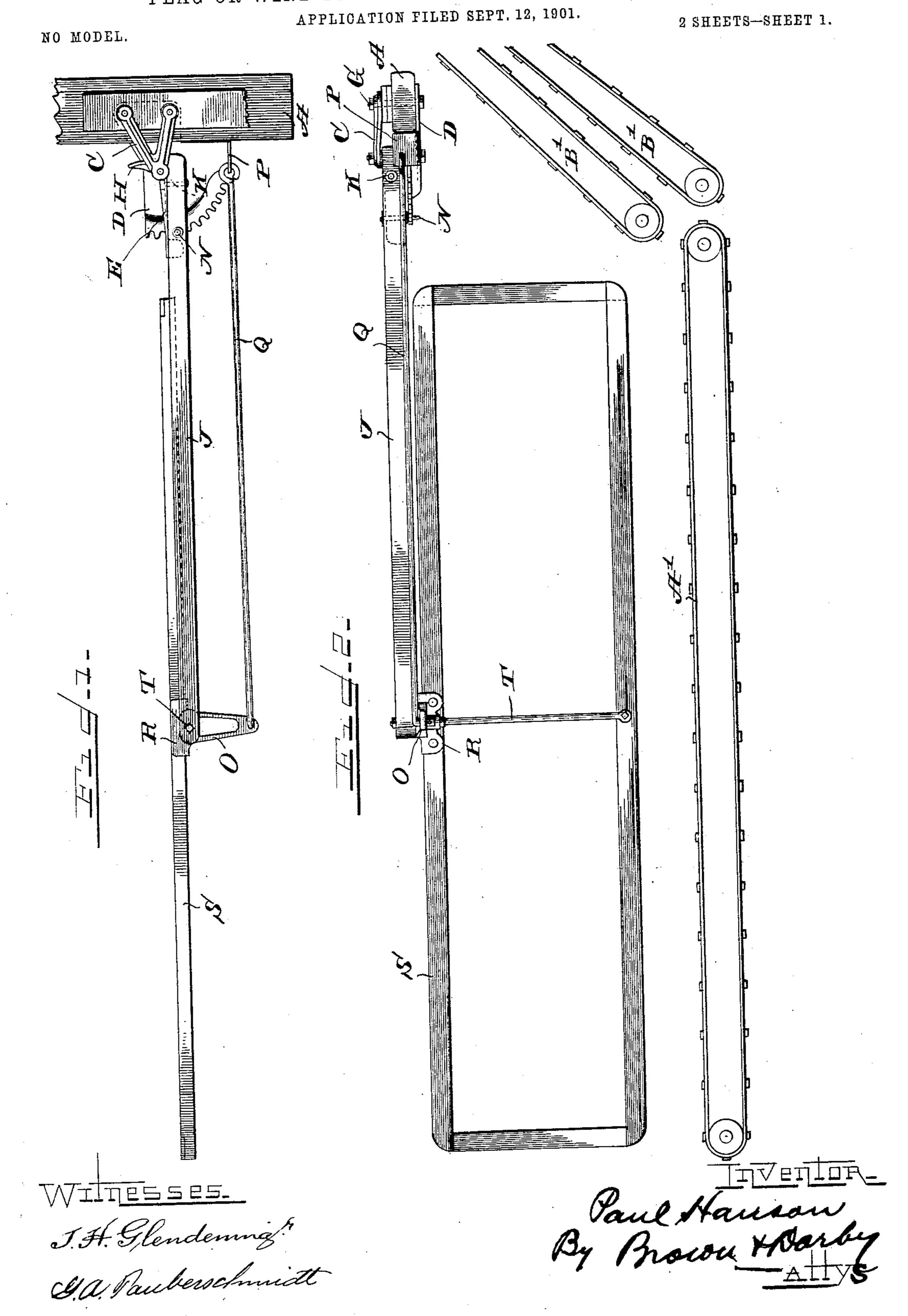
P. HANSON.

FLAG OR WIND BREAK FOR HARVESTING MACHINES.

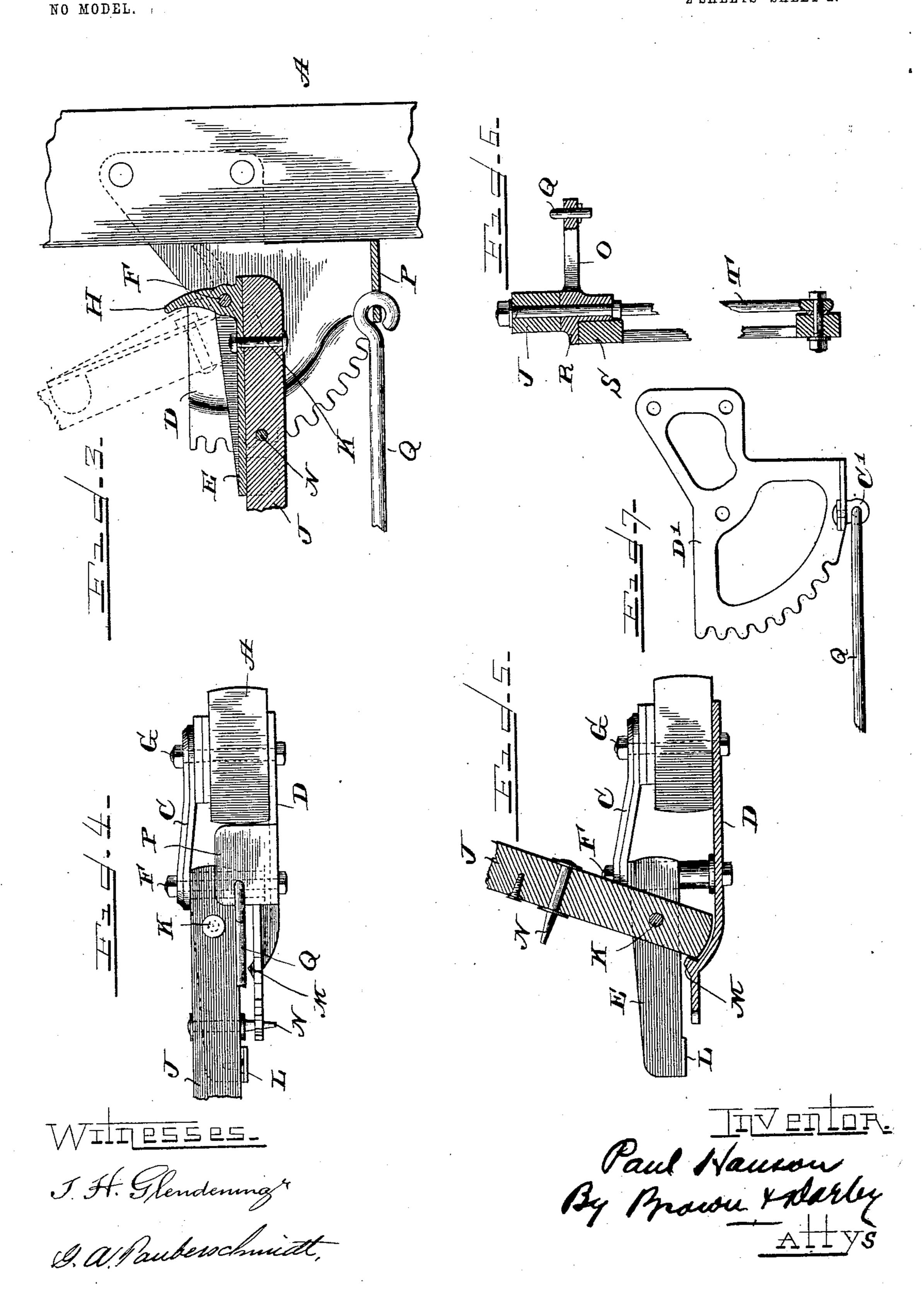


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APPLICATION FILED SEPT. 12, 1901.

2 SHEETS-SHEET 2.



UNITED STATES PATENT OFFICE.

PAUL HANSON, OF CHICAGO, ILLINOIS.

FLAG OR WIND-BREAK FOR HARVESTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 745,831, dated December 1, 1903.

Application filed September 12, 1901. Serial No. 75,167. (No model.)

To all whom it may concern:

Be it known that I, PAUL HANSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Flag or Wind-Break for Harvesting-Machines, of which the following is a specification.

This invention relates to flags or wind-

breaks for harvesting-machines.

The object of the invention is to provide a construction of wind-break or flag which is

simple, economical, and efficient.

A further object of the invention is to provide means whereby the flag or wind-break may be readily adjusted to accommodate different lengths of grain and maintain constant parallelism.

A further object of the invention is to provide means whereby the flag or break when not required in use may be folded or raised

out of operative position.

Other objects of the invention will appear

more fully hereinafter.

The invention consists, substantially, in the construction, combination, location, and arrangement of parts, all as will be more fully hereinafter set forth, as shown in the accompanying drawings, and finally pointed out in the appended claims.

Referring to the accompanying drawings, and to the various views and reference-signs

appearing thereon—

Figure 1 is a plan view of a flag or wind-break for harvesting-machines embodying the principles of my invention. Fig. 2 is a side view of the same. Fig. 3 is a broken detail view, parts in horizontal section and parts in top plan, showing the means for supporting the flag or wind-break. Fig. 4 is a broken view, in side elevation, of the same. Fig. 5 is a view similar to Fig. 4, showing the flag or break supporting bar in raised position. Fig. 6 is a broken detail view in section, showing the manner of connecting the operating-link to the wind-break. Fig. 7 is a broken detail view showing a slight modification.

The same part is designated by the same reference-sign wherever it occurs throughout to the several views.

Reference-sign A designates part of the

seat-plank of a harvesting-machine. C is a bracket securely bolted to said plank.

D is a plate also bolted to the seat-plank A, preferably on the under side thereof, as 55 shown, and having a quadrant-shaped edge in which are formed openings or teeth, as

clearly shown.

E designates a bracket or casting pivotally supported upon a bolt F, arranged to pass 60 through bracket C. If desired, this bolt may also pass through and serve to secure quadrant-plate D. The bracket C is bolted to seat-plank A by means of bolts G, which may also serve to bolt or clamp plate D to said 65 seat-plank. The pivot-bolt F affords a vertical-axis pivot about which bracket or casting E may swing in a horizontal plane. If desired, said bracket or casting E may be provided with a heel or extension H, arranged 70 to form a limiting-stop to limit the swinging movement of said bracket or casting in a horizontal direction, as clearly indicated in dotted lines in Fig. 3.

J designates the flag or wind-break sup- 75 porting bar. This bar is pivotally connected, as at K, to the bracket or casting E on a horizontal axis, so that said bar may be swung vertically about said axis, as clearly indicated in Fig. 5. The bracket or casting E is 80 provided with a lateral extension or flange L, and when said bar J is in its lowered position said bar rests upon said lateral extension or projection. If desired, the bracket or casting E may be provided with a lug or projec- 85 tion M, (see Fig. 5,) arranged to form a limiting-stop for arm J when said arm is swung or raised into vertical position. Carried by bar J is a pin or projection N, arranged when said bar is in its lowered position to be re- 92 ceived in a notch or opening or tooth of the quadrant edge of plate D, thereby forming a lock to prevent lateral or horizontal swinging of said arm or bar and of casting or bracket E.

Pivotally connected at its inner end, as, 95 for instance, to an upturned flange P of plate D, is a rod Q. The outer end of said rod is loosely pivoted or otherwise suitably connected to an arm O, carried by a bracket R, which bracket is bolted or otherwise suitably 100 secured to the frame S of the flag or windbreak. A bolt T, passing through the outer

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end of arm or bar J and connected to frame S, affords a support for said frame and a means for pivotally connecting and supporting arm O and its bracket R. If desired, the quad-5 rant or plate may be a malleable casting D', cut out, as shown in Fig. 7, to secure lightness. In Fig. 7 I have also shown a slightlymodified connection of rod Q to the plate D', wherein the rod Q is hooked into an eyebolt of the plate or casting D'.

10 C', which is pivotally mounted upon flange P From the foregoing description the operation of the device will be clearly understood and is as follows: When it is desired to set 15 the flag or wind-break into proper position with reference to a particular length of the grain being cut, the supporting-bar J is lowered into horizontal position to rest upon the flange L of bracket or casting E and with the 20 pin or projection N, carried thereby, in engagement with the notch or tooth in plate D. When it is desired to shift the flag or break for longer or shorter grain, the flag or break supporting bar J is slightly rocked or tilted 25 about its pivot-bolt K to cause the pin or projection N to clear the notch or socket in the plate D with which it engages, and then the bracket or casting E, with the supporting arm or bar J, is rocked about pivot-bolt F either 30 forwardly or backwardly into the desired position for pin or projection N to be received in the proper notch or seat in plate D, thereby locking said supporting arm or bar. The horizontal swinging movement imparted to 35 arm or bar J in effecting the desired adjustment causes the outer or free end of said arm or bar J to swing about the axis of pivotpivotally secured at its inner end to plate D 40 and connected at its outer end, as above described, to arm O, causes said arm to rock or swing about the supporting-bolt T and causes the flag or wind-break to constantly maintain parallel positions in whatever po-45 sition of lateral or horizontal swing or adjustment of supporting arm or bar J. In other words, the shifting of the flag from one position to another does not disturb its parallelism with respect to itself in whatever posi-50 tion to which it may be adjusted. The heel

H of bracket or casting E serves to limit and form a stop for said bracket or casting to limit the swinging movement thereof, said heel engaging the seat-plank or other convenient 55 fixed part, as clearly indicated in dotted lines in Fig. 3. When it is desired to dispense

with the use of a flag or wind-break, the supporting arm or bar J may be rocked or swung vertically about its pivot-bolt K until the stop

60 M is engaged. This stop is so relatively arranged that the bar J will pass beyond a true vertical position in the vertical swinging movement thereof, thereby holding or locking said arm or bar in its elevated position,

65 as clearly indicated in Fig. 5. Thus it will be seen that I employ a fixed bracket to which is hinged upon a vertical axis a casting upon l

which the flag or wind-break supporting arm is hinged or pivoted upon a horizontal axis. It will also be seen that the flag or wind-break 70 is pivotally supported upon its supporting arm or bar at the outer or free end of the latter and has connection with a link or rod through which its parallelism is maintained in whatever position of adjustment it may 75 occupy. It will also be seen that I provide an exceedingly simple and efficient construction whereby the desired adjustment of the flag or wind-break may be effected expeditiously, wherein the flag or break always main- 80 tains parallelism with respect to itself in whatever position of adjustment it may occupy, and wherein its supporting arm or bearing may be held in elevated or raised position when the flag or break is not required for use. 85

In Fig. 2 I have shown the arrangement of wind-break or flag embodying my invention in its relation in use to the lower platformcarrier (indicated by reference-sign A') and the elevator, (indicated generally by refer- 90

ence-sign B'.)

It is obvious that many variations and changes in the details of construction and arrangement would readily occur to persons skilled in the art and still fall within the 95 spirit and scope of my invention. I do not desire, therefore, to be limited or restricted to the exact details shown and described; but,

Having now set forth the object and nature of my invention and a construction embody- ioo ing the principles thereof, what I claim as new and useful and of my own invention, and desire to secure by Letters Patent, is—

1. In an apparatus of the class described, a bolt F; but the link or connection Q being | fixed bracket, a casting pivotally supported 105 upon said bracket to swing horizontally and provided with a heel extension beyond its pivot arranged to form a stop to limit the horizontal swinging movement thereof, a supporting-bar pivotally supported upon said 110 casting to swing vertically, a flag or windbreak pivotally supported upon said bar, and a link pivotally connected at one end to said bracket and at the other end to said flag or wind-break, as and for the purpose set forth. 115

2. In an apparatus of the class described, a fixed bracket, a casting pivotally mounted thereon to swing horizontally and provided with a laterally-extending supporting-flange, a supporting-bar pivotally mounted on said 120 casting to swing vertically and normally resting on said flange, a flag or wind-break pivotally supported upon said bar, and a stop formed on said casting and arranged to limit the horizontally-swinging movement of said 125 casting, as and for the purpose set forth.

3. In an apparatus of the class described, a fixed bracket, a casting pivotally mounted thereon and provided with a heel or projection extending beyond its pivot and arranged 130 to limit the extent of swinging movement thereof, a supporting-bar carried by said bracket, a flag or wind-break pivotally supported upon said bar, and means connected

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with said flag or break for maintaining parallelism thereof during the swinging movement of said bar and casting, as and for the pur-

pose set forth.

fixed bracket, a quadrant-plate having peripheral openings or seats, a supporting-bar pivotally mounted upon said bracket and carrying a pin or projection arranged to project laterally therefrom and to enter said openings or seats to hold the same in adjusted position, a flag or wind-break supported upon said bar, and means connected to said flag or wind-break for maintaining parallelism thereof in the adjusted position of said bar, as and for the purpose set forth.

5. In an apparatus of the class described, a bracket, a casting pivotally mounted thereon to swing horizontally, a supporting-bar pivotally mounted upon said casting to swing vertically thereon, a flag or wind-break supported upon said bar, and a stop for limiting the vertical-swinging movement of said bar, said stop arranged to be engaged by said bar after the latter has passed a vertical position in the swinging movement thereof, as and for

the purpose set forth.

6. In an apparatus of the class described, a bracket, a supporting-bar pivotally mounted to thereon to swing vertically, a flag or wind-

break carried by said bar, and a stop for limiting the vertical-swinging movement of said bar, said stop arranged in position to be engaged by said bar when the latter has moved past a vertical position, whereby said bar is 35 held in its raised position, as and for the pur-

pose set forth.

7. In an apparatus of the class described, a supporting-bar, a supporting-rod mounted therein, a flag or wind-break carried by said 40 rod, an arm connected to said rod for rocking the same, a link connected to said arm, whereby when said supporting-bar is swung into adjusted position said rod is rocked to cause said flag or wind-break to maintain parallelism, a casting upon which said bar is pivotally mounted to swing vertically, said casting being pivotally mounted to swing horizontally and provided with a lateral flange forming a support for said bar when the latter is in its 50 normal position, as and for the purpose set forth.

In witness whereof I have hereunto set my hand, this 30th day of August, 1901, in the presence of the subscribing witnesses.

PAUL HANSON.

Witnesses:

T. P. COCHRANE, JUDSON LATTIN.