

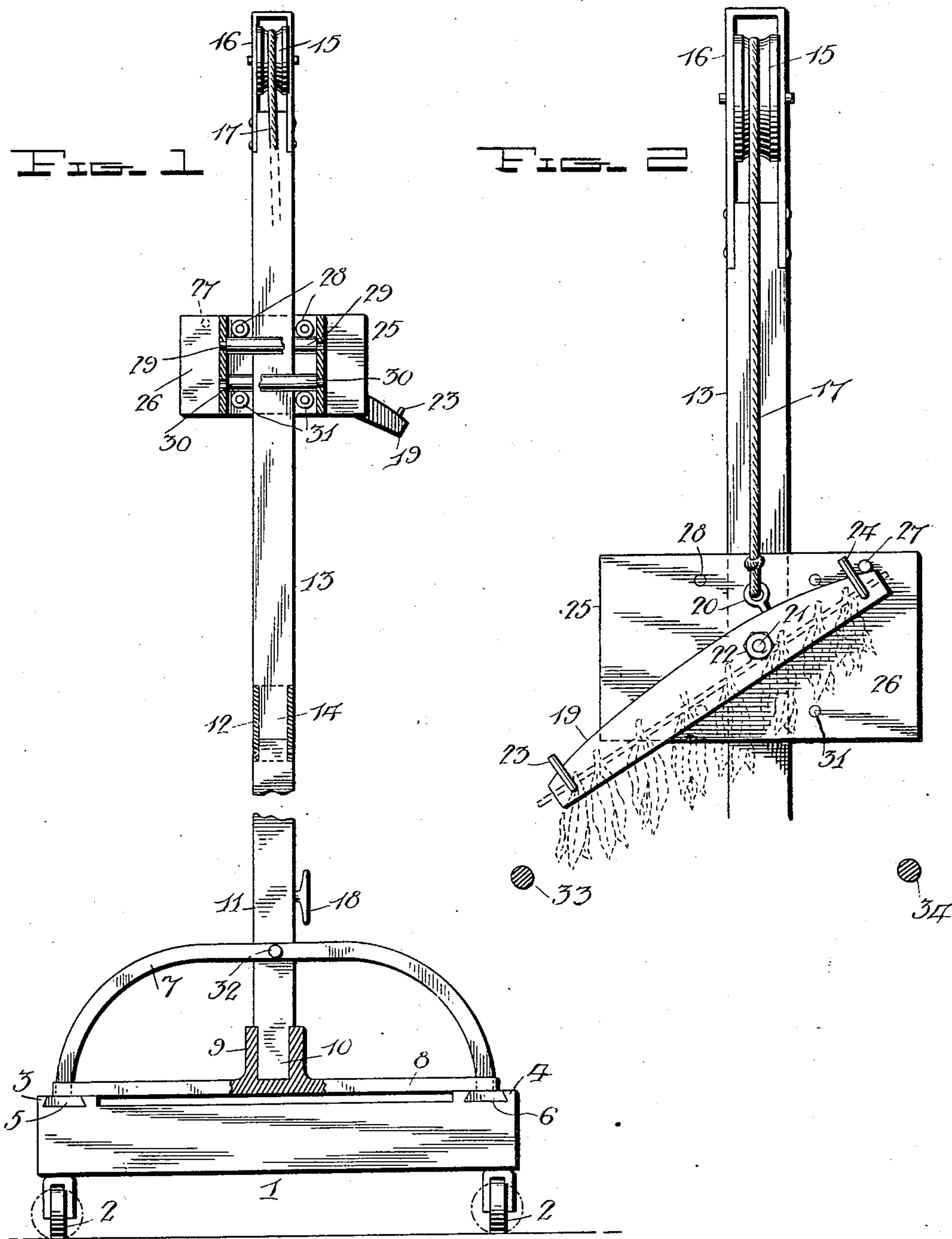
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W. P. HENRY.
TOBACCO HOISTER.

(Application filed May 28, 1902.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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TOBACCO-HOISTER.

SPECIFICATION forming part of Letters Patent No. 706,052, dated August 5, 1902.

Application filed May 28, 1902. Serial No. 109,364. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. HENRY, a citizen of the United States, residing at Central City, in the county of Muhlenberg and State of Kentucky, have invented certain new and useful Improvements in Tobacco-Hoisters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to tobacco-hoisters, and has for its object the production of a movable hand-operated apparatus for raising and placing "sticks" of tobacco-leaves in position on poles arranged in the customary manner to receive the sticks.

In arranging hands or bundles of tobacco-leaves to be dried in a barn a number of bundles are placed at intervals along a rod six feet, more or less, in length, which is then commonly known and called a "stick of tobacco." Each stick is suspended with its ends resting on poles suitably supported parallel with each other and at a distance apart less than the length of the stick. The poles upon which the sticks are borne are located in series or tiers, one tier above another, and there may be six or more of these tiers of poles. The width of the space between the parallel poles may be four or four and one-half feet or such a matter. As each stick of tobacco weighs anywhere from twenty-five to fifty pounds, depending upon the number of hands or bundles of tobacco and their size, it becomes usually a most exhausting labor for a man working alone, as many tobacco-raisers of moderate means are compelled to do, to fill the various "rooms" or spaces between the poles with the full number of sticks of tobacco which they are expected to support.

My invention is intended particularly to enable a single operator to raise and place the sticks of tobacco at any height without the aid of hired help and without the continuous and considerable personal labor demanded in raising and placing them alone and by hand.

Each constituent element of my invention

is described in detail and its individual office, together with the mode of operation of the whole, is fully explained hereinbelow.

I accomplish the objects stated by means of the parts and their association illustrated in the accompanying drawings, of which—

Figure 1 represents a perspective side view of my invention, one or more parts being shown in section; and Fig. 2 is a view of the upper portion of the staff detached with the runner and its attached elements all somewhat enlarged and showing the manner in which a stick of tobacco is placed in position upon the parallel poles, which are indicated in cross-section.

Like numerals refer to like parts throughout.

Considering the drawings, numeral 1 marks a platform of convenient size and strength movable on the rollers or casters 2. At opposite sides of the platform are the retaining-guides 3 and 4, and the flat feet 5 and 6 of the curved iron brace 7 are located in the guides and can slide in them from one end to the other. Immediately above the feet of the brace a cross-piece 8 connects one side of the brace with the other, and at its middle point the cross-piece is provided with a socket 9. The middle portion of the cross-piece is shown in section. Occupying the socket 9 is the foot 10 of the jointed staff. The staff may consist of any number of separable lengths. Two lengths are illustrated. The lower one is designated by number 11, and at its top it is furnished with a strong metal socket iron or cuff 12, which as my invention is usually constructed is flush with the surface of the part 11 of the staff. Each length of the staff is ordinarily formed of a rectangular bar of wood, and the cuffs are let into the wood and do not present any enlargement or obstruction to the passage of the runner hereinafter described. The second length 13 of the staff has its foot 14 in engagement with the socket formed by the cuff 12 and makes practically one staff or pole, which, as stated, may be of any length or number of divisions. On top of the upper length 13 of the staff is fixed the pulley 15, customarily a grooved pulley, and through the housing 16 of the pulley and resting in its groove is the hoisting-rope 17. One end of rope 17 is capable of being made fast

to the cleat 18 on the lower length 11 of the staff, and the remaining end is secured either directly to bar 19 by means of the eye 20, as illustrated, or to the runner. Bar 19 is pivotally held upon the pivot-pintle 21 by nut 22. The pintle projects from the face of the runner. It will be noted that bar 19 is not pivoted at its middle point and that the eye 20 is placed on the bar at its pivotal point. The arms 23 and 24, projecting from the ends of the bar 19 and ordinarily having their ends upwardly curved, as shown, are to receive the stick of tobacco, as indicated in Fig. 2.

One form of the runner or slide 25 consists, as illustrated, of a rectangular housing or box having a more or less extended face-plate 26, from which the pivot-pintle 21 projects, carrying the bar 19. A second pin 27 projects from the face-plate and limits the tilt of the pivoted bar 19, as best shown in Fig. 2. Within the runner are the rollers 28 28, 29 29, 30 30, and 31 31, arranged in pairs at right angles to each other and presenting roller-bearing surfaces at the top and bottom of the interior of the runner to each of the four sides of the rectangular staff. It will now be understood that the runner can be drawn up to the top of the staff or allowed to descend by its own weight to the brace 7 at the point where the bolt 32 passes through the staff portion 11 and through the brace, securing the two together, yet permitting the staff to be readily detached. Furthermore, it is believed to be clear that the runner cannot swing around, for the reason that the staff is rectangular. This construction prevents the stick of tobacco from swaying about, making it difficult to raise and place.

In operation a stick of tobacco is placed upon the curved arms 23 and 24, as shown in Fig. 2. As the width of the space through which the stick is to be raised is only four feet, while the stick is five feet in length, it is obvious that the latter could not be elevated horizontally. By tilting the bar as shown no difficulty is experienced in raising the stick to any height, and when the stick has risen above the two parallel poles upon which it is to be placed a very slight movement of the platform will bring the lower end of the stick in over pole 33, whereupon the rope being allowed to run through the pulley and the runner to descend the other extremity of the stick will come to rest on the second and parallel pole 34, the runner and arm continuing down the staff, leaving the stick upon the parallel poles.

The explanation of the operation given thus far will suffice to enable the placing of a stick to be followed anywhere excepting very close

to the wall of the barn. In order to bring the staff near the wall, the feet 5 and 6 of the curved iron brace 7 are moved in the guides 3 and 4 of the platform, and the staff is thus caused to take up its position as near as may be desired to the barn-wall. When one room of the barn has received its full quantity of tobacco, the staff is disjointed and taken to another room, where it is again erected and the operation renewed, one man readily performing each and all of the various steps set forth herein.

I am aware that rectangular pole-hoisting devices hand-operated have been employed, and I do not claim that feature solely or broadly.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In a tobacco-hoister, the combination of a staff, a pulley located at the top of the said staff, a runner engaging the staff, a bar pivotally supported upon the runner, and a hoisting-rope passing over the pulley and arranged to raise and lower the runner, substantially as described.

2. In a tobacco-hoister, the combination of a staff consisting of separable portions, a pulley located at the top of the said staff, a runner engaging the staff, a bar pivotally supported upon the runner, and a hoisting-rope passing over the pulley and arranged to raise and lower the runner, substantially as described.

3. In a tobacco-hoister, the combination of a staff, a pulley located at the top of the said staff, a runner engaging the staff, a bar pivotally supported upon the said runner, the said bar being provided with means for holding a stick of tobacco, the said bar being pivoted at one side of its middle point, and a hoisting-rope passing over the pulley and arranged to raise and lower the runner, substantially as described.

4. In a tobacco-hoister, the combination of a rectangular staff, a pulley located at the top of the said staff, a runner constructed to engage the staff, a bar pivotally supported upon the said runner, the said bar being provided with means for holding a stick of tobacco, a hoisting-rope passing over the pulley and arranged to raise and lower the said runner, a movable platform having guides, and devices sliding in the said guides of the platform and constructed to hold the staff upright, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM P. HENRY.

Witnesses:

NEWTON BELCHER,
CHARLES EAVES.