

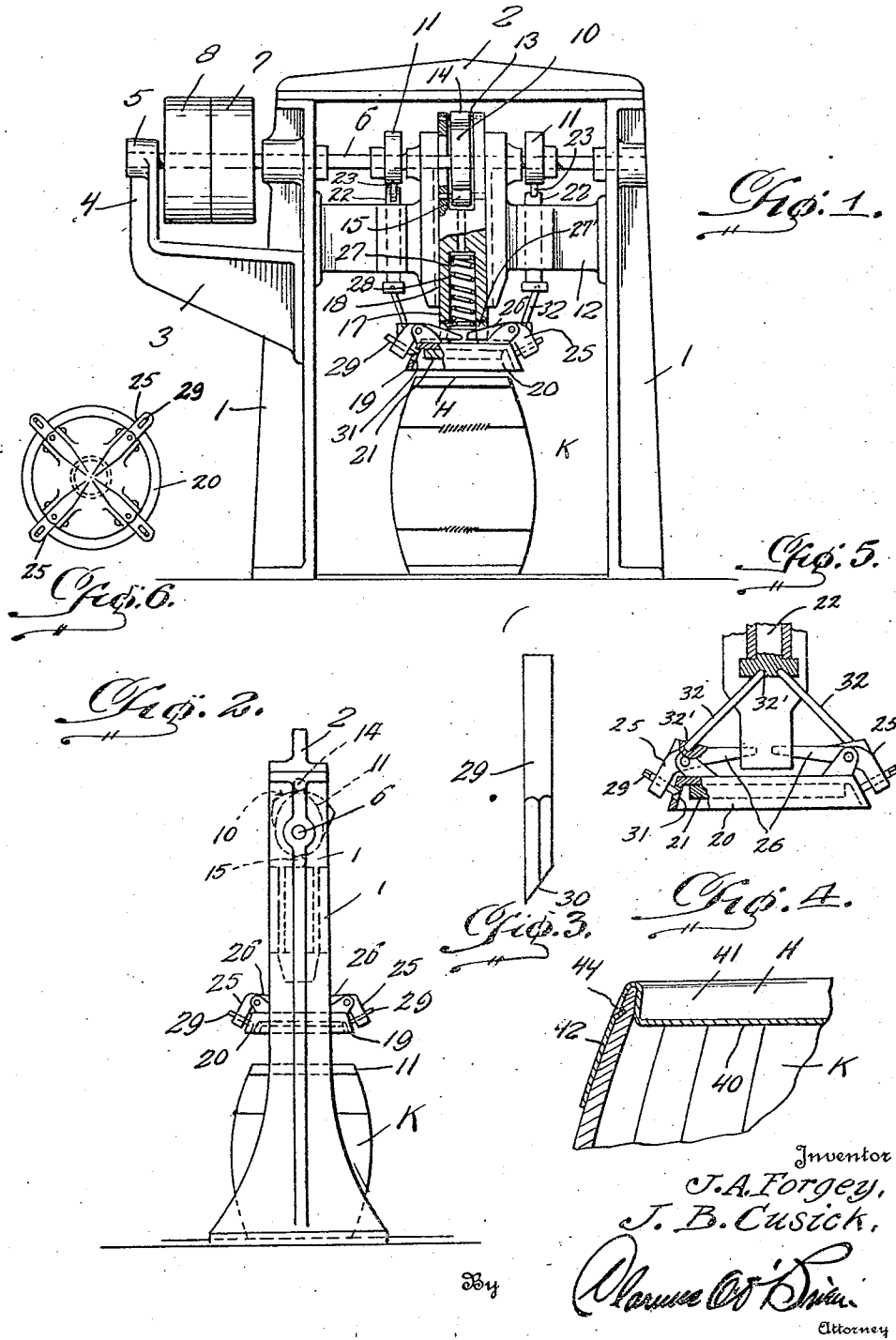
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HEADING MACHINE

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HEADING MACHINE.

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The present invention relates to a machine for heading kegs, barrels and the like, and has for its principal object to provide a machine of this nature which may be operated by a single workman with a minimum amount of labor, whereby considerable expense is eliminated, as compared to the common method and means used for heading receptacles of that nature.

10 Another very important object of the invention is to provide a machine of this nature which will lock the head to the keg, so as to prevent its displacement therefrom.

15 Another important object of the invention is to provide, in a heading machine of this nature, means for cutting a burr from the head and for projecting the same into the staves of the keg.

20 A still further object of the invention is to provide a heading machine of this nature possessed of an extremely simple and efficient structure, which is reliable in operation, inexpensive to construct and to operate, easy to manipulate, not liable to readily get out of order, strong, durable, and well adapted for the purpose for which it is designed.

25 With the above and numerous other objects in view, as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

30 In the drawing:

Figure 1 is a front elevation of the machine, embodying the features of my invention, a portion being shown in section.

35 Figure 2 is an end elevation thereof, taken at right angles to that shown in Figure 1.

40 Figure 3 is a detail elevation of a tool used with the machine.

Figure 4 is a detail sectional view, showing the head on the barrel as locked thereto by this machine.

45 Figure 5 is a detail view, and

Figure 6 is a top plan view of the header.

Referring to the drawing in detail, it will be seen that 1 designates the supports which are disposed vertically and connected at their upper ends by the cross brace 2. A bracket 3 extends laterally from an intermediate portion of one support 1, and has an upstanding portion 4 terminating in a bearing 5. A shaft 6 is journaled through the supports 1 adjacent their upper ends

and also through the bearing 5 of the bracket 3, so as to be disposed substantially horizontal. A drive pulley 7 is mounted on the shaft 6, between one support 1 and the bearing 5 of the bracket 3, and a loose pulley 8 is disposed alongside of the pulley 7, in order that the guide belt may be shifted from one to the other in the usual manner, for controlling the operation of the shaft 6. A cam 10 is provided on the shaft 6 centrally between the supports 1, and a pair of cams 11 are disposed, one on each side of the cam 10 at a distance therefrom as clearly illustrated in Figure 1.

70 A guide 12 is supported between the supports 1 below the shaft 6 and is provided with a guideway 18 for slidably receiving the plunger 17 and functions as an additional bearing for the shaft 6. The upper end of this plunger 17 is slotted, as at 13, and in the upper end of this slot there is disposed a cam engaging roller 14, and in the bottom end of the slot there is disposed a cam engaging roller 15, so that when the cam 10 is rotated, the plunger 17 reciprocates in the guide 12. A header 19 is disposed on the bottom end of the plunger 17 and is provided with a frusto-conical shaped apron or skirt 20, depending therefrom, and a block 21 disposed on the under surface thereof with its periphery spaced from the inner surface of the skirt 20.

85 Plungers 22 are slidable vertically through the guide 12, one on each side of the guideway 18, and the upper ends thereof are provided with rollers 23 engageable with cams 11. A plurality of tool holders 25 are pivoted, intermediate their ends to the header 19, and each includes an inwardly extending arm 26. These arms 26 project into the pocket 27 through openings 27', provided in the plunger 17, and are engaged by the bottom end of a spring 28, positioned in this pocket, so that the tools 29 in the holders 25 have their cutting ends positioned in the openings 31, provided in the skirt 20. Links 32 terminate in indentures 32' provided in the bottom ends of the plungers 22 and also in the holders 25, it being noted that the spring 28 impinging against the holders 25 will prevent dislodgment of these links.

100 The head H is placed on the open end of the keg K, as is shown to advantage in Figure 4, and includes the closure plate 40, having an annular rim 41, in the form of an upstanding flange, which merges into a sub-

stantially frusto-conical shaped skirt 42, disposed on the outside of the upper or open end of the keg. When the header 19 is moved downwardly by the cam 10, through the intermediacy of plunger 17, the skirt 20 engages skirt 42, while block 21 engages the plate 40, and thus forces the head into place on the barrel, and as the shaft 6 further rotates the cams 11 come into operation and push downwardly on plungers 22, actuating the links 32, so as to pivot or swing the holders 25 to project the tools through the openings 31 of the skirt 20 and cause these tools to cut the burrs 44 and project them into the outer surface of the keg K. When the holders 25 are swung, as just described, the arms 26 will compress the spring 28, so that as the cams continue to rotate, the spring will swing the holders so as to withdraw the tools through the openings 31, and as the shaft 6 rotates still further, the cam 10 will withdraw the header upwardly from off the keg.

It will be apparent from the above that we have devised a very simple and efficient machine, which can be controlled by a single individual for heading the kegs quickly and effectively. The present embodiment of the invention, which we have shown by way of example, attains all of the features of advantage enumerated in the statement of the

invention and the above description, and it is apparent that this embodiment is susceptible of numerous changes in the details of construction, in the materials, in the dimensions, in the numbers, and in the combination and arrangement of parts, without departing from the spirit or scope of the invention as hereinafter claimed, or sacrificing any of its advantages.

Having thus described our invention, what we claim as new is:

In a machine of the class described, a supporting structure, a plunger slidably mounted in the supporting structure, a second plunger slidably mounted in the supporting structure, a shaft, cams on the shaft, one for each plunger, a header supported on the lower end of the first plunger, a pair of tool holders pivotally mounted on the header, said first plunger provided with a pocket, a spring in the pocket, an arm on the tool holder engaged with the end of the spring for normally holding the holder in an inoperative position, and a link connecting the holder with the second plunger for operation thereof all in the manner and for the purpose specified.

In testimony whereof we affix our signatures.

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