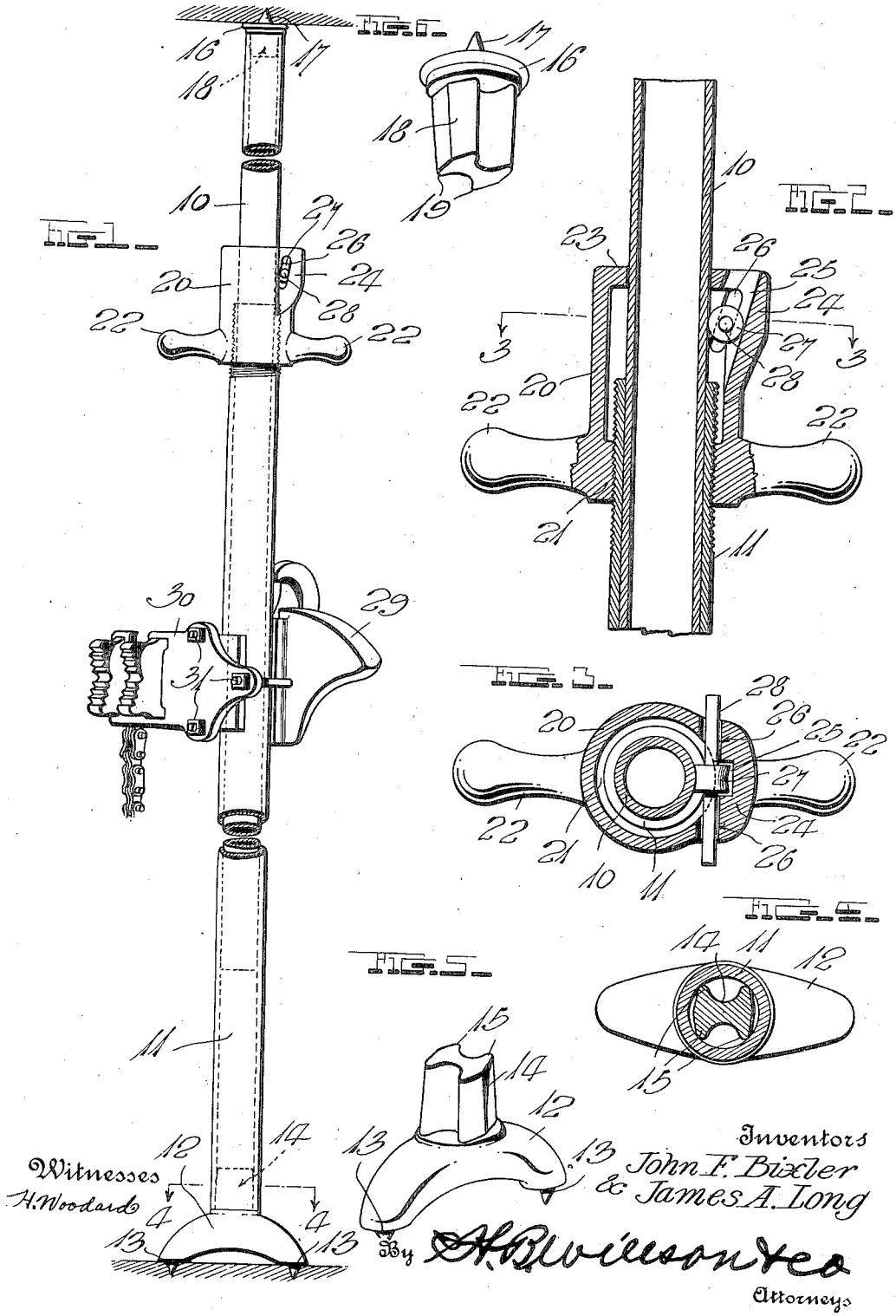
J. F. BIXLER AND J. A. LONG.

VISE POST.

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UNITED STATES PATENT OFFICE.

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VISE-POST.

1,390,189. Specification of Letters Patent. Patented Sept. 6, 1921.

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To all whom it may concern:

Be it known that we, JOHN F. BIXLER and JAMES A. LONG, citizens of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Vise-Posts; and we 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.

This invention relates to an improved vise post used for carrying a vise and pipe bender, and one object of the invention is to provide a post having telescoping sections which may be clamped and securely but releasably held in an adjusted position.

Another object of the invention is to provide a clutch having an improved tubular body construction and also having a friction roller mounted therein in an improved manner, so that the friction roller may firmly grip one section of the post and securely hold the same in an adjusted position.

Another object of the invention is to so construct the body portion of this pipe gripping clutch that it may be adjustably and removably mounted upon one of the pipe sections and extend beyond the end thereof so that the roller may have proper engagement with the second pipe section.

Another object of the invention is to provide the two pipe sections with improved anchoring means to prevent the post from slipping out of a vertical position.

This invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a view showing the improved vise post in side elevation,

Fig. 2 is a fragmentary sectional view through the post and coupling,

Fig. 3 is a sectional view taken along the line 3—3 of Fig. 2,

Fig. 4 is a sectional view taken along the line 4—4 of Fig. 1,

Fig. 5 is a perspective view of the anchoring member at the lower end of the post, and

Fig. 6 is a perspective view of the anchoring member at the upper end of the post.

This improved post is provided with upper and lower sections 10 and 11 which are in the form of pipes, the pipe or section 10 slidably fitting into the pipe or section 11 and thus providing the post with telescoping end sections so that the post may be longitudinally adjusted. A curved foot 12 is provided for this post and is provided with floor penetrating spikes 13 and with a shank 14 tapered longitudinally and cut from opposite sides to provide longitudinally extending ribs 15. It will thus be seen that when the shank is driven into the lower end of the section 11, the ribs will engage the pipe and the shank will be firmly wedged in the lower end portion of this pipe or section 11. A disk 16 is provided as a head for the upper end of the section 10 and is provided with a spike 17 for penetrating a ceiling beam. This disk or head 16 is provided with a shank 18 which is similar to the shank 14 and is tapered and cut from opposite sides to provide ribs 19 similar to the ribs 15 of the shank 14. The shank 18 can, therefore, be driven into the upper end of the section 10 and will be firmly wedged therein. It will thus be seen that the post is so constructed that its lower end may have firm engagement with a floor or other ground support and its upper end may have firm engagement with a cross beam. This will prevent the post from having transverse movement and the post will be securely held in a vertical position.

In order to securely but releasably hold the section 10 in an adjusted position with respect to the section 11, there has been provided a clutch which is carried by the section 11 and engages the section 10. This clutch is provided with a sleeve or tubular body 20 which is provided at its lower end with an inwardly extending threaded flange 21 for engaging the threads formed at the upper end of the section 11. Handles 22 extend from the lower end portion of this sleeve or body 20 so that the sleeve may be easily rotated for adjustment upon the pipe 11. At its upper end, the sleeve 20 is provided with an inwardly extending flange 23, to provide a close fit between the sleeve 20 and the pipe 10 which forms the upper section of the post. An offset 24 is formed adjacent the upper end of the sleeve thus providing a pocket 25 which is open at its upper end and has its side walls provided with slots 26 which extend longitudinally of the sleeve and diagonally thereof. A roller 27 is positioned in this pocket 25 and is provided with a stem 28 which extends transversely of the pocket and through the slots 26. Since the slots 26 are cut at an incline, as shown clearly in Fig. 2, the roller when moving downwardly will be guided in-

wardly and will be brought into engagement with the pipe or post section 10. This will cause a binding action between the roller and the pipe and sloping outer wall of the pocket 25 when the post section 10 will be securely clamped and held in an adjusted position. When it is desired to release the section and permit it to be moved inwardly of the pipe or section 11, it is simply necessary to draw the roller to an inoperative or raised position, by means of the extended end portions of the stem 28, and the pipe 10 will be released and can be moved downwardly.

When this device is in use, the post will be positioned vertically and the section 10 moved upwardly until the spike 17 engages the roof beam. The friction roller will secure the section 10 in the adjusted position and the post will be at approximately the proper height. The handles 22 can then be grasped and the sleeve rotated so that it will move upwardly upon the threaded portion of the lower section 11. The section 10 will be carried upwardly with the sleeve 20 and the spike 17 will be firmly driven into the beam. At the same time, the spike 13 will be forced downwardly into the flooring and the post will be firmly held in place. The pipe bending device 29 and vise 30 are releasably held in an adjusted position upon the post by the securing bolt 31 and it will thus be seen that the vise and pipe bending device can be positioned upon the post at the desired height after the post has been put in place. When it is desired to remove the post, it is simply necessary to turn the sleeve so that the sleeve will be screwed down upon the section 11 and the section 10 can then be moved upwardly a sufficient distance to release the roller. The roller can then be held in an elevated position and the section 10 dropped into the section 11. It will thus be seen that the post is so constructed that it can be securely held in a vertical position and easily and quickly set up or taken down.

What is claimed is:

1. A vise post comprising a lower tubular section, an upper section slidably fitting in the lower section, a clutch having a tubular body threaded upon the upper portion of the lower post section for adjustment thereon to impart longitudinal adjustment to said post, and gripping means carried by the clutch for releasably gripping the upper post section and permitting longitudinal adjustment of the post sections independent of adjustment of the clutch upon the lower post section.

2. A vise post comprising a lower tubular section, an upper section slidably fitting into the lower section, a sleeve screwed upon the upper portion of the lower section, a gripping roller slidably mounted in the clutch sleeve for holding the upper post section against downward sliding movement when the upper post section is longitudinally adjusted and the roller is wedged between the upper section and the wall of the clutch sleeve, rotation of the clutch sleeve moving the same longitudinally upon the threaded portion of the lower post section for further longitudinal adjustment of the post sections.

3. A vise post comprising telescoping upper and lower sections, a sleeve in threaded engagement with one of the sections and having its walls provided with diagonally extending slots cut longitudinally of the sleeve, a friction roller positioned in the sleeve and having a stem extending through the slots of the sleeve to slidably and rotatably mount the roller for wedging action between the wall of the sleeve and the second post section, and turning handles extending from the sleeve for rotating the sleeve and providing final adjustment for the post.

4. A vise post comprising a lower section and an upper section in telescoping engagement therewith, a sleeve threaded upon one of the sections and having one side portion offset to provide a pocket having a diagonally disposed outer wall and having side walls provided with longitudinally extending slots cut diagonally of the sleeve, a gripping roller positioned in the pocket and having a stem extending through the slots of the pocket, and handles extending from the sleeve to provide turning means for the sleeve.

5. A vise post comprising a lower section, a foot having a shank extending into the lower section, an upper section slidably fitting into the lower section, a head having a shank extending into the upper end of the upper section, the foot and head being provided with support engaging teeth and each of said shanks being cut from opposite sides to provide ribs for frictional engagement with the section receiving the shank, a clutch sleeve adjustably carried by the lower section, and a friction roller carried by the clutch sleeve for engaging the upper section.

6. A vise post comprising a lower section, an upper section having telescoping engagement with the lower section, a clutch sleeve adjustably carried by the lower section for adjustment longitudinally thereon, and means carried by the sleeve for frictionally engaging the upper section and releasably supporting the same in a set position, adjustment of the sleeve upon the lower section imparting final longitudinal adjustment to the post after the upper section has been moved longitudinally and secured in an adjusted position by said gripping means.

In testimony whereof we have hereunto set our hands.

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