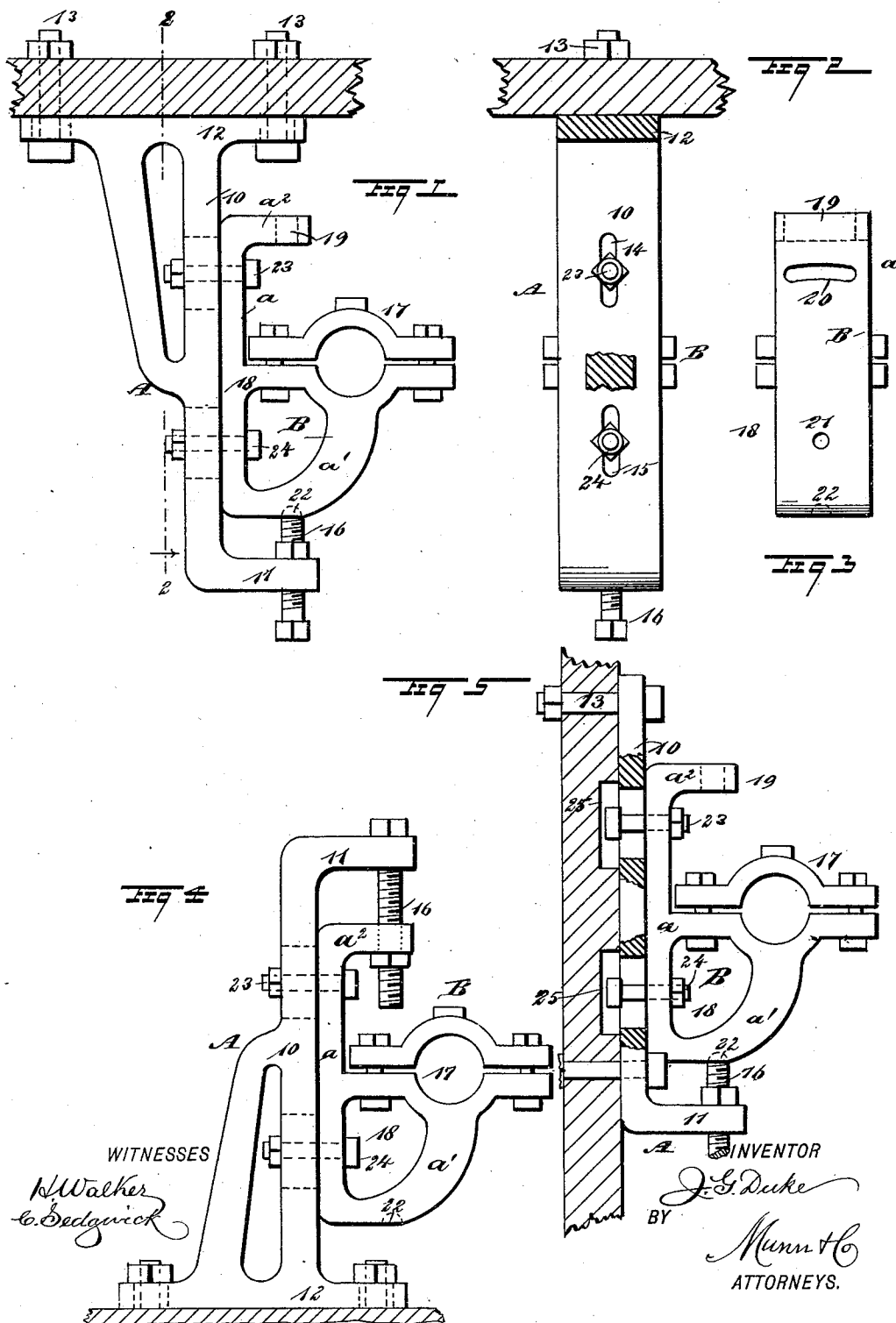


(No Model.)

J. G. DUKE.
HANGER.

No. 479,254.

Patented July 19, 1892.



UNITED STATES PATENT OFFICE.

JAMES GARLAND DUKE, OF MEMPHIS, TENNESSEE.

HANGER.

SPECIFICATION forming part of Letters Patent No. 479,254, dated July 19, 1892.

Application filed March 16, 1892. Serial No. 425,162. (No model.)

To all whom it may concern:

Be it known that I, JAMES GARLAND DUKE, of Memphis, in the county of Shelby and State of Tennessee, have invented a new and useful Improvement in Hangers, of which the following is a full, clear, and exact description.

My invention relates to an improvement in hangers especially adapted for supporting shafting, pipes, &c., and has for its object to provide a hanger of simple, durable, and economic construction capable of being used in connection with an overhead support—as a ceiling, for instance, a floor, or a vertical support; and another object of the invention is to provide in connection with the hanger a box capable of adjustment upon the hanger both vertically and laterally, which box may be employed no matter in what position the hanger may be placed.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the hanger and its box, the hanger being represented as being suspended from and attached to an overhead support. Fig. 2 is a vertical section through the hanger, taken, practically, on the line 2 2 of Fig. 1. Fig. 3 is a rear elevation of the box removed from the hanger. Fig. 4 is a side elevation of the hanger and the box, the former being illustrated as attached to a floor or a like support; and Fig. 5 is a side elevation of the box and a partial side elevation and sectional view of the hanger, the latter being represented as used with a vertical support.

The hanger A is angular in general contour, comprising, mainly, a body-section 10, which is ordinarily made straight, and an arm 11, projected from the body-section at one end at a right angle, as illustrated in all the figures of the drawings. That end of the body opposite that carrying the arm 11 may be provided with a foot 12, which when employed is wider than the body, and this foot,

when the hanger is used in connection with an overhead support or is adapted for engagement with a floor, engages with the support and receives the bolts 13 or other attaching medium; but the body of the hanger may be perfectly straight, as shown in Fig. 5, in order that it may be connected with a vertical support in a convenient manner.

The body of the hanger is provided with two longitudinally-located slots 14 and 15, placed at each side of its center, which slots are elongated, and the arm 11 of the hanger-body has a threaded aperture therein adapted to receive an adjusting-screw 16. The box B, used in connection with the hanger, consists of a bearing 17 for the shaft or pipe, of any approved construction. This bearing is supported by a bracket 18, and this bracket comprises, ordinarily, a straight body-section a , an upwardly-curved arm a' , connected with the bottom of the body and extending upward for the prime or main support for the bearing 17, and the formation of the bracket is completed by producing at the top a horizontal arm a'' , extending outward at right angles to the body, and this arm has formed therein a long transverse slot 19. The body of the bracket-section of the box is provided near the top with a transverse elongated slot 20, preferably somewhat curved, as shown in Fig. 3, and near its lower end the said body-section of the box has an opening 21 formed therein, and a recess 22 is likewise made in the under portion of the lower bracket-arm a' .

The attachment between the box and the hanger is effected primarily through the medium of two adjusting-bolts 23 and 24. These bolts pass one through the upper transverse slot 20 of the box and the upper longitudinal slot in the body of the hanger. The other bolt passes through the lower opening 21 in the upright portion of the box and through the lower slot in the hanger, the said bolts being provided with suitable nuts, as illustrated in Figs. 1 and 2. When the hanger is attached to an overhead support, as shown in Fig. 1, the adjusting-screw 16, carried by the arm 11 of the hanger-body, which arm will now be beneath the box, enters the recess 22 of the box, and a lateral adjustment may be effected by loosening the lower bolt 24, so that the box may be turned thereon as upon a pivot, and

loosening, also, the upper bolt 23, whereby the box may be rocked upon its pivot in direction of either side of the hanger and be secured in the desired lateral position; or a vertical adjustment may be effected by loosening both bolts 23 and 24 and manipulating the lower adjusting-screw 16 in a manner to carry the box upward or permit it to fall downward. It will be readily observed that by this means a proper alignment of a shaft or line of pipe may be made, no matter whether or not it is necessary to give the pipe or shaft a decided fall, and that the alignment may be accomplished in a most convenient and expeditious manner.

When the hanger is to be attached to a floor or other low support, the arm 11 is at the top, and the adjusting-screw 16 passes through the slot 19 in the upper arm a^2 of the box, being provided with a suitable locking-nut below said arm. In this event a lateral adjustment may be made by loosening the adjusting-screw 16 and the bolts 23 and 24, and vertical adjustment may be effected by manipulating the adjusting-screw 16 when the said bolts 23 and 24 have been loosened.

In Fig. 5 the hanger and its box are illustrated as connected with a vertical support. The attachment between the hanger and the support, which may be a pillar or post, for instance, is effected by passing the connecting-bolts 13 through the support and through the body portion of the hanger, and the arm 11 of the hanger in this instance is preferably located at the bottom, assuming the same position that it occupies when the hanger is attached to the overhead support, and the adjusting-screw 16 also enters the recess 22 in the box. In order that the adjusting-bolts 23 and 24 may be manipulated when the hanger is attached to the post or pillar, the latter is provided with recesses 25 to receive the heads of the bolts 23 and 24.

It will be observed that in the construction

of the hanger above described the arm of the hanger carries the adjusting-screw, which is exceedingly needful in the manipulation of the box, and that the box is supported at all times in such manner that it may not only be adjusted vertically, but laterally also, as heretofore stated, and that no matter in what position the hanger may be placed its adjusting-screw will be brought in engagement with the box, the said screw having a parallel position with respect to the hanger-arm. The box B may be used without the hanger A and is capable of being secured to any support.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with a hanger capable of attachment to an overhead, to a vertical, or to a low horizontal support, the said hanger comprising, essentially, a body-section and an arm extending at an angle therefrom at one end, the body-section of the hanger being provided with elongated slots located one above the other, of a box consisting of a bracket comprising a body section having an elongated transverse slot therein near one end and an aperture near the opposite end, an arm projected from one end of the body and having an elongated opening formed therein, a second arm extending from the body and supporting a bearing, the latter arm being provided with a recess, adjusting-bolts passed through the upper body-slot of the bracket and the lower aperture therein and through the elongated slots in the body of the hanger, and an adjusting-screw carried by the arm of the hanger, adapted to enter the recess in one arm of the box or pass through the slot in the opposite arm of said box, as and for the purpose specified.

JAMES GARLAND DUKE.

Witnesses:

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WM. M. SMITH.