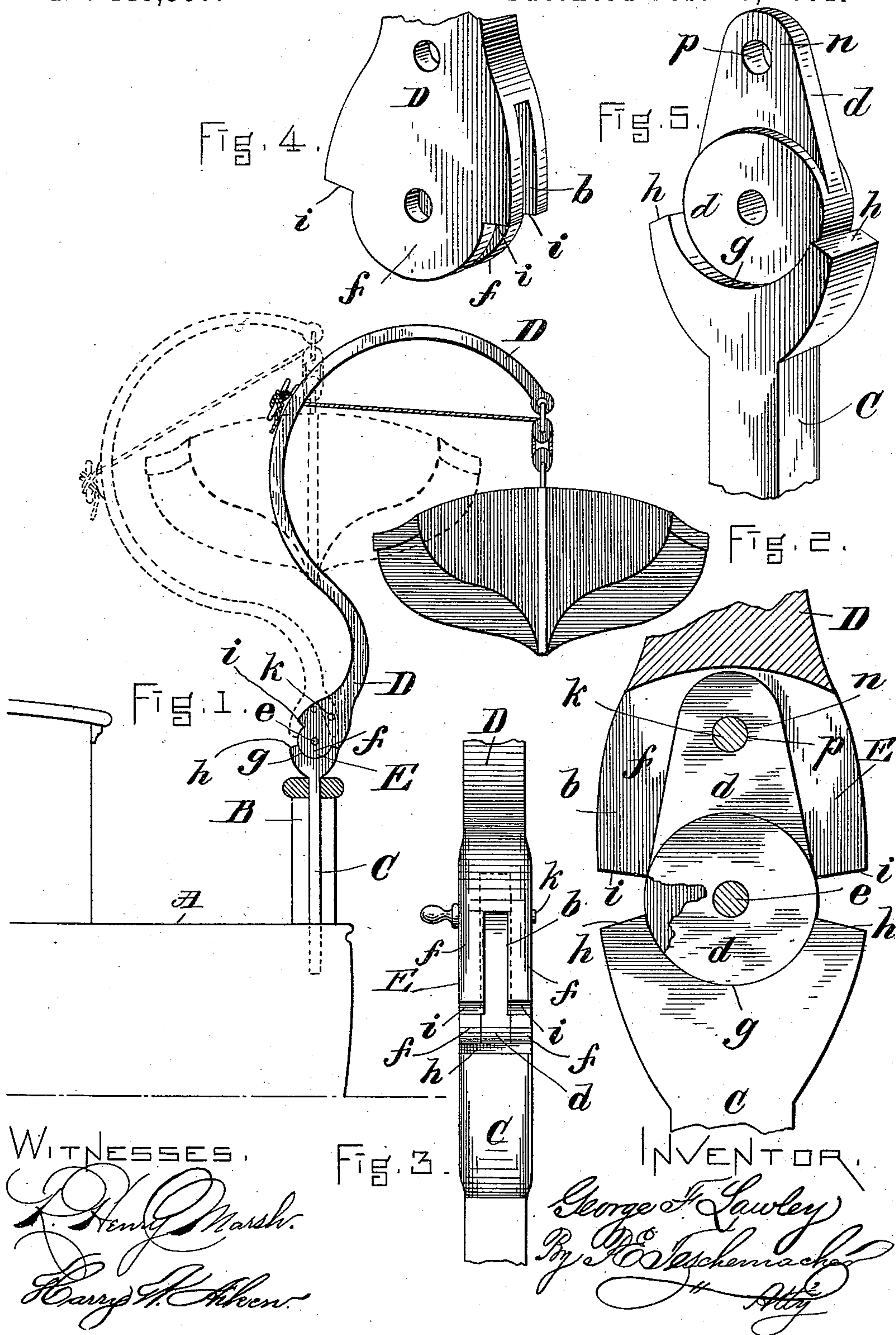


(No Model.)

G. F. LAWLEY.
DAVIT FOR BOATS.

No. 446,357.

Patented Feb. 10, 1891.



WITNESSES,

R. Henry Marsh.
Harry H. Allen.

Fig. 3.

INVENTOR,

George F. Lawley
By R. W. Schenck
Att'y

UNITED STATES PATENT OFFICE.

GEORGE F. LAWLEY, OF BOSTON, MASSACHUSETTS.

DAVIT FOR BOATS.

SPECIFICATION forming part of Letters Patent No. 446,357, dated February 10, 1891.

Application filed October 6, 1890. Serial No. 367,266. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. LAWLEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Davits for Boats, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of a boat-davit constructed in accordance with my invention. Fig. 2 is a vertical section (enlarged) through the lower portion of the same. Fig. 3 is a front elevation of the portion represented in Fig. 2. Figs. 4 and 5 are enlarged perspective views of two portions or members of the rule-joint separated from each other.

My invention relates to boat-davits in which the davit-arm is provided at its lower end with a hinge-joint, so that it can be swung inward or outward, as may be required; and my invention has for its object to improve the construction of davits of this description, whereby the joint at the bottom of the davit-arm, together with the stops for limiting its movement in either direction, are rendered stronger and more capable of resisting the strain to which they are subjected when the boat is swung over in either direction.

To this end my invention consists in a davit-arm hinged to its support or base by means of a rule-joint of novel construction provided with shoulders or stops on each side for limiting the movement of the davit-arm in either direction, as hereinafter set forth.

In the said drawings, A represents the deck of a vessel, and B the rail, through which passes in the usual manner the vertical bolt C, which supports the davit-arm D, the lower end of the bolt C fitting into a socket in the water-way or plank-shear of the vessel. The davit-arm D is hinged to the upper end of the supporting-bolt C by means of a rule-joint E, one portion or member of which is formed by cutting an open slot *b* in the lower enlarged end of the davit-arm D, and the other portion or member by forming a tongue *d* on the upper end of the enlarged end of the bolt C, the two being connected by a pivot-pin *e*. The lower ends of the cheeks *f* at the lower end of the davit-arm are curved in the arc of

a circle and fit into correspondingly-curved recesses *g*, formed on opposite sides of the upper end of the bolt C, the outer surfaces of the cheeks and the sides of the bolt C being flush, as seen in Fig. 3.

On each side of the tongue *d* is formed a solid shoulder *h* of the entire width of the bolt C, against which strike the corresponding shoulders *i*, formed on each side of the cheeks *f* of the davit-arm when the latter is swung over to either side on the pivot-pin *e*, thus limiting its movement in either direction, as desired. The davit-arms D, which are curved outward, as usual, and provided with the ordinary tackle, can thus be swung outboard on their joints E to carry the boat into a position over the water, so that it can be raised or lowered without coming into contact with the side of the vessel, and when the boat is raised into the position seen in Fig. 1 the davit-arms can be swung inward to bring the boat over the deck, if desired. When in either of these two positions the davit-arm will be held in place by the weight of the boat, but is preferably locked by means of a pin *k*, which passes through a hole in both cheeks *f f* and lies on one side or the other of an extension *n* of the tongue *d*, thus preventing the davit-arm from being moved until the pin *k* has been withdrawn. The tongue *d* is provided with a central hole *p*, through which the pin *k* is passed when it is desired to hold the davit-arm in an intermediate position, as shown in dotted lines in Fig. 1.

It will be obvious that the construction of the lower shoulders *h* of the above-described rule-joint is such that a solid bearing will be presented to resist and support the weight of the boat, which thus produces a direct downward pressure upon said shoulders, which cannot consequently become broken or injured by the strain or pressure to which they are subjected.

I am aware that a davit-arm has been hinged to its support within a socket consisting of two parallel plates provided at their inner and outer corners with projections which serve as stops for limiting the swinging movement of the arm in either direction; but in practice it is found that these projections or stops soon become bent or broken by the constant contact therewith of the shoulders on the davit-

arm as the latter is swung over with the boat from side to side.

My invention differs from this in presenting a much stronger and more durable joint having solid shoulders on each side so constructed that the weight or pressure will be exerted thereon in a downward instead of a lateral direction, thereby enabling my improved joint to successfully resist any possible strain which may be brought upon it.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a boat-davit, a davit-arm hinged to its supporting bolt or base by means of a rule-joint E, the members of which are provided on the inner and outer sides with shoulders *h* *i*, the lower shoulders *h* being adapted to receive a direct downward pressure produced by the weight of the suspended boat, substantially as described.

2. In a boat-davit, the vertical supporting-bolt C, provided with a tongue *d* and shoulders *h* *h* on opposite sides of the same, said tongue having an extension *n* provided with a hole *p*, combined with the davit-arm D, having its lower end slotted to form cheeks, between which is pivoted the tongue *d*, said cheeks having shoulders *i* *i* on opposite sides adapted to contact with and exert a direct downward pressure upon the shoulders *h* *h*, and the pin *k*, adapted to pass through holes in the cheeks *f* *f* and engage the extension *n* of the tongue *d* to lock the davit-arm in place, substantially as set forth.

Witness my hand this 2d day of October, A. D. 1890.

GEORGE F. LAWLEY.

In presence of—

P. E. TESCHEMACHER,
HARRY W. AIKEN.