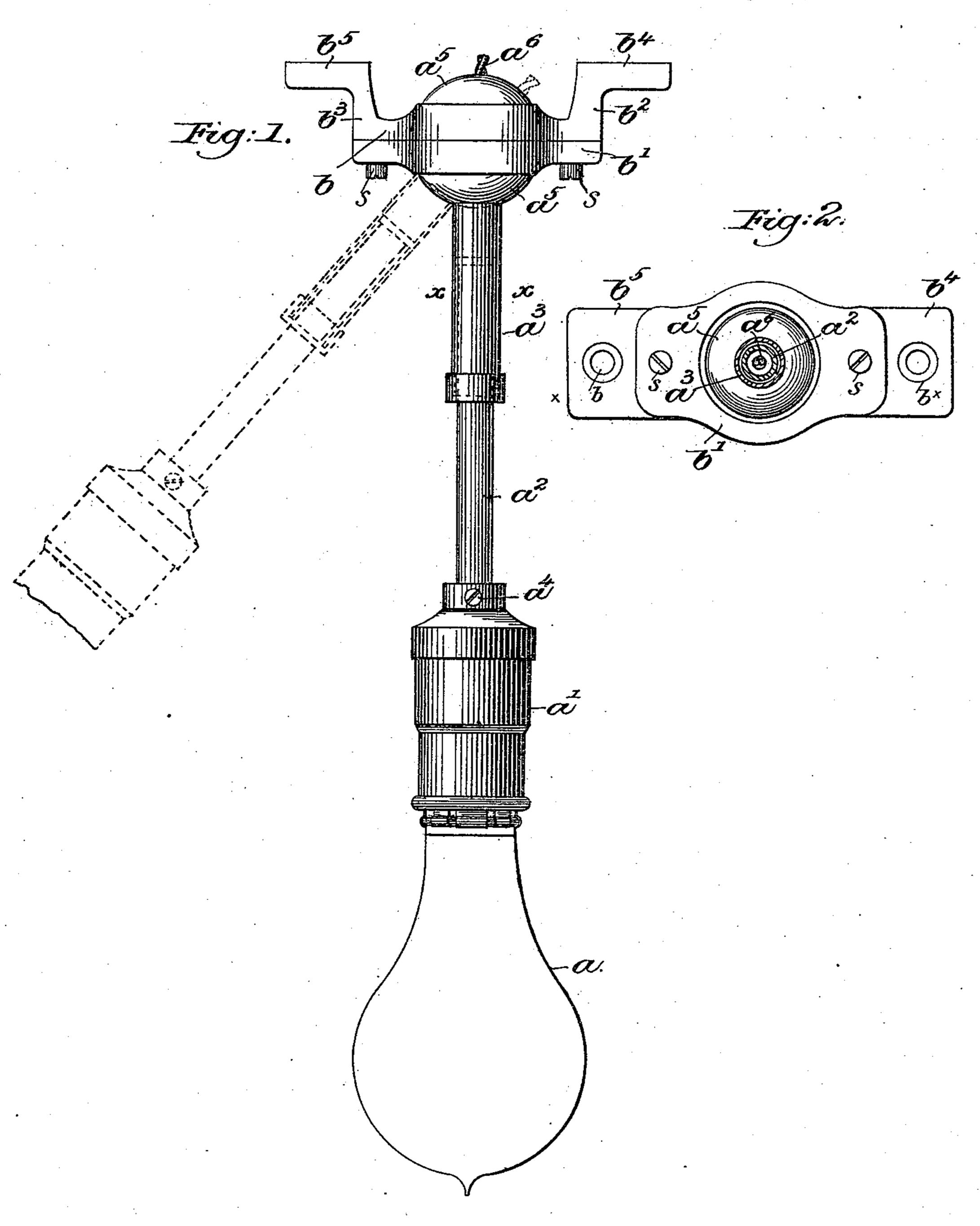
(No Model.)

## A. T. GIFFORD. INCANDESCENT LAMP FIXTURE.

No. 501,502.

Patented July 18, 1893.



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## United States Patent Office.

ALENZA T. GIFFORD, OF HOPEDALE, MASSACHUSETTS.

## INCANDESCENT-LAMP FIXTURE.

SPECIFICATION forming part of Letters Patent No. 501,502, dated July 18, 1893.

Application filed November 28, 1890. Serial No. 372,760. (No model.)

To all whom it may concern:

Be it known that I, ALENZA T. GIFFORD, of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in 5 Incandescent-Lamp Fixtures, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to provide ro incandescent electric lamps with a fixture of novel construction, as will be described, whereby the said lamp may be turned into any desired position and be retained frictionally in

said position.

In accordance with my invention, a rigid incandescent lamp-stem provided at one end with a ball having a diametrical opening for the passage of the insulated conductors of the lamp, is held frictionally between two nar-20 row ring-like halves or parts of a friction clamp, each half being concaved to embrace the ball about its equatorial part and leave the poles of the ball exposed, in order that the stem and the wires may be moved through 25 an arc of considerable length without obstruction from the said clamp, and means to hold the parts of the clamp closely pressed to the ball to hold it frictionally when left. Preferably one of the said clamp sections has feet, 30 by which to attach the clamp in position but at a slight distance from the wall, as will be described. The particular features of my invention

will be hereinafter more fully described and 35 claimed at the end of the specification.

Figure 1 represents in elevation an incandescent electric lamp provided with a fixture embodying my invention, and Fig. 2 is a section on the line x-x, Fig. 1, looking upward.

The incandescent lamp a provided with a socket a', may be of any usual or well known construction. The socket a' has secured to or forming part of it one end of a rigid stem, herein shown as made of two parts  $a^2$ ,  $a^3$ , pref-45 erably hollow tubes, the tube  $a^2$ , as herein shown, being secured to the socket a' by the set screw  $a^4$ . The tube  $a^2$ , as herein shown, is extended within the hollow tube  $a^3$ , and is frictionally held therein, and the said hollow l

tube  $a^3$  has secured to its opposite end a ball 50  $a^5$ , preferably of metal, provided with a diametrical opening through which the usual insulated conductors  $a^6$  may be passed. The ball  $a^5$  is fitted into a socket in a clamping or holding device composed of two narrow con- 55 cavo-convex ring-like parts b, b' adapted to embrace the equatorial part of the ball at right angles to the stem  $a^3$ , leaving the poles of the ball co-incident with the conductor passage uncovered, the space in each ring-like 60 part being sufficient to enable the stem of the lamp to be swung for a considerable distance universally or in any direction, the conductors entering the ball also moving with the ball without contact with the clamping device. 65 The ring-like part b is provided with feet  $b^4$ ,  $b^5$  having holes  $b^{\times}$  adapted to receive screws by which to connect the feet to a ceiling or wall, the feet preventing the ball or the wire from rubbing on the wall or ceiling. The two ring- 70 like parts of the clamp are held together by two suitable screws s, s, the rotation of which enables the two parts of the clamp to hug the ball all the more closely so as to retain the ball frictionally in the position into which it 75 may be put. The ball  $a^5$  is secured within its socket by screwing or otherwise fastening the part b' of the clamping device to the part b. The ball  $a^5$  may be clamped in its socket with any desired degree of friction by screwing the 80 part b' more or less tightly to the part b of the clamping device, and the lamp a may be turned into any position desired, as for instance as indicated by dotted lines Fig. 1, and it will be frictionally held in its adjusted 85 position until positively moved by hand.

My improved fixture is especially adapted to be used in work-shops and like places, where a single lamp may be radially adjusted to give light to the operator working upon 90 one or more machines in the immediate vicinity of the lamp, and the said lamp may be readily adjusted as to height, by pushing the

hollow tube  $a^2$  within the tube  $a^3$ .

The electric current does not enter the ball, 95 and the ball does not form a path for the current as has heretofore been done; but on the contrary, the ball fits the clamp snugly and

there is no current from the ball to the clamp, or vice versa. The wire is insulated with relation to the ball.

I claim—

or vided at one end with a ball having a diametrical wire passage for the circuit wires of the lamp, combined with a separable clamp composed of narrow rings having concavities to embrace the ball at or near its equatorial part and leave the poles of the ball uncovered, and means to hold the parts of the clamp together and cause the clamp to embrace the said ball by a measured friction, substantially as described.

2. A rigid incandescent lamp stem, provided at one end with a ball having a diametrical wire passage for the circuit wires of the lamp, combined with a separable clamp composed of narrow rings having concavities to embrace the ball at or near its equatorial part and leave the poles of the ball uncovered, and means to hold the parts of the clamp together and cause the clamp to embrace the said ball by a measured friction, one of the said rings being provided with feet adapted to rest on a wall and keep the end of the ball

receiving the wires away from the wall and provide a free space in which the wires may move as the ball is turned, substantially as 30 described.

3. The combination with the socket of an incandescent lamp, of a fixture secured thereto and consisting of a rigid stem carrying at one end the lamp and at the other end thereof a ball, having a diametrical hole for the passage of the electric wires, and a two-part annular clamp b, b' embracing the equatorial zone of the ball to hold it frictionally in adjusted position, said clamp bearing directly 40 against the ball and being held thereto by screws uniting the two parts of the clamp, one of said parts being provided with arms extending beyond the circumference of the ball, by which the clamping device is secured 45

In testimony whereof I have signed my name to this specification in the presence of

in position, substantially as described.

two subscribing witnesses.

ALENZA T. GIFFORD.

Witnesses:
JAS. H. CHURCHILL,
EMMA J. BENNETT.

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