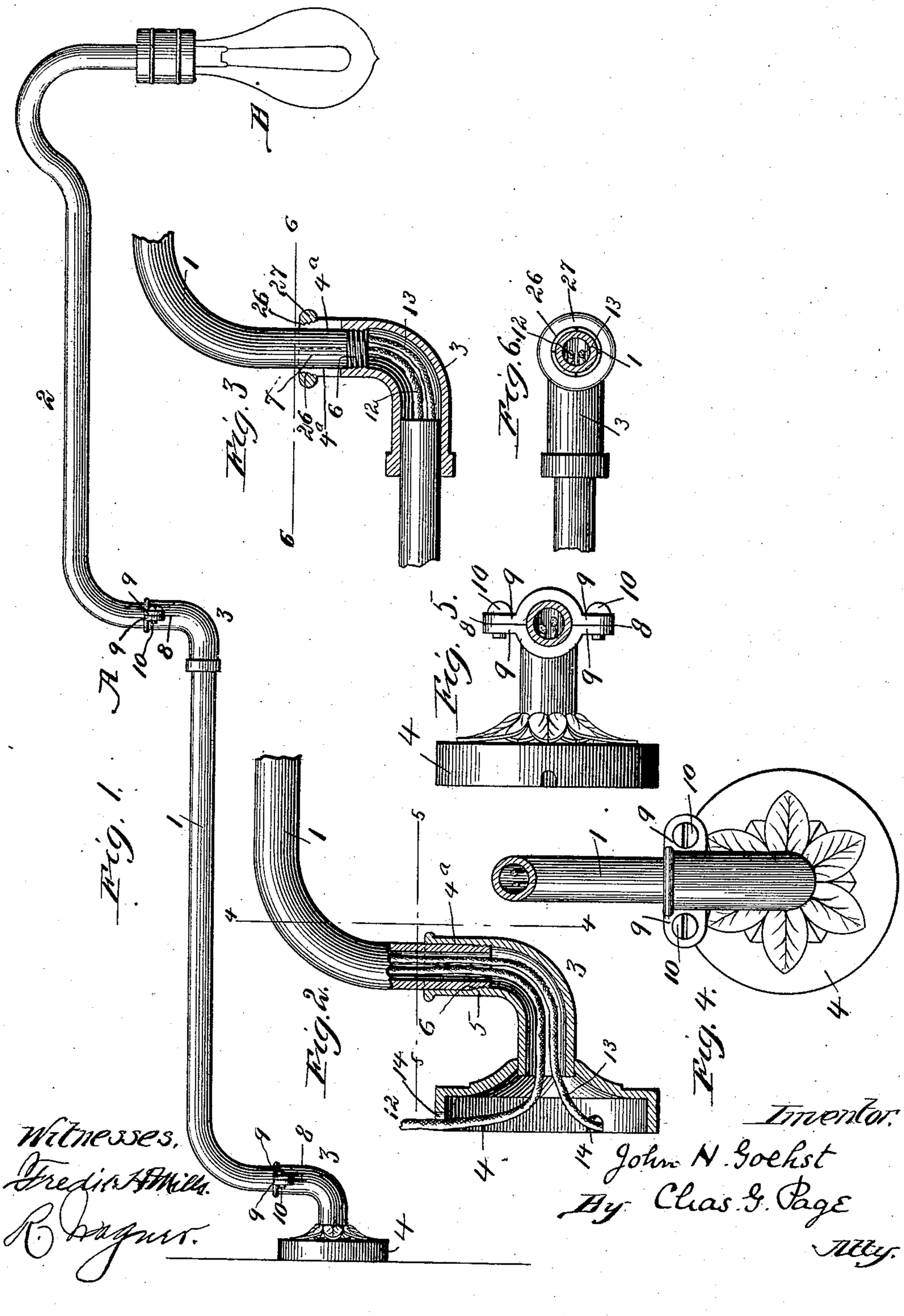
(No Model.)

J. H. GOEHST.

BRACKET FOR INCANDESCENT ELECTRIC LAMPS.

No. 471,732. Patented Mar. 29, 1892.



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BRACKET FOR INCANDESCENT ELECTRIC LAMPS.

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Application filed March 9, 1891. Serial No. 384,272. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. GOEHST, of the city of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Brackets for Incandescent Lamps, of which the following is a specification.

My invention relates to jointed brackets or fixtures for incandescent electric lamps, and has for its principal objects to provide a simple, economical, and durable construction; to prolong the life of the joint or joints; to avoid reliance upon screw-threaded connections as bearing and wearing surfaces at the joints; to obviate the binding incident to turning a threaded connection and further avoid wear incident to the constant turning of a threaded joint; to permit the joint to be operated with ease and at the same time adjust it so as to prevent it from operating too easily; to insure steadiness of action and take up all wear, and to provide certain novel and improved details, serving to increase the general efficiency of brackets for incandescent lamps.

To the attainment of the foregoing my invention consists in matters hereinafter set forth.

In the accompanying drawings, Figure 1 represents a bracket embodying my invention. Fig. 2 represents, on a slightly-larger scale, the inner end portion of the bracket, partly in central longitudinal section. Fig. 3 represents the middle portion of the bracket, partly in central longitudinal section. Fig. 4 is a section on line 4 4 in Fig. 2. Fig. 5 is a section on line 5 5 in Fig. 2. Fig. 6 is a section on line 6 6 in Fig. 3.

The bracket A, which is shown complete in Fig. 1, comprises a couple of long tubular arm-sections 1 and 2, which are connected together by a bent tubular elbow coupling or section 3, adapted to permit what may be termed the "outer section" 2 of the bracket to be swung horizontally and independently of the inner section 1. The inner section 1 of the bracket is connected with a base or bracket plate 4 by a bent tubular coupling-section 3, which is constructed like the coupling between the sections 1 and 2 and adapted to permit the section 1 to be swung horizontally and independently of the bracket-plate, in which way by adjusting the section 1 the bracket-arm formed by the sections 1 and 2 can be swung as a whole, or, when desired, the outer section 2 can be swung independently of the inner section 1.

The coupling-section 3, which provides a connection between the sections 1 and 2 of the bracket, is at one end fitted rigidly upon the outer end of section 1, while on the other hand the coupling which forms a joint between section 1 and the bracket-plate is securely fitted to the latter. The upturned ends of the couplings 3 provide sockets in which the inner ends of the section 1 and 2 are received and permitted to turn, so that said sections may be swung horizontally for the purpose of adjusting the incandescent lamp B.

Each coupling-section is internally threaded at a point back from its upper outer end, so as to provide it with a smooth unthreaded wall portion 4^a, which extends from the upper end of the coupling back to the threaded wall portion 5. The ends of the sections which are arranged to turn within these internally-threaded coupling-sections are threaded, as at 6, and adapted to engage the threaded portions of the internally-threaded coupling-sections. The threaded connection between a coupling-section and one of the arm-sections permits the latter to be swung freely and serves simply as a connection, which prevents the arm-section from being out of connection with the coupling-section, and to such end I form the engaging threaded portions of the coupling-section and arm-section so as to provide a loose threaded connection which will not bind, although the arm-section be swung to any desired extent. The smooth bore or unthreaded portion 4^a of the coupling-section constitutes the bearing proper for the swinging bracket-arm section and can be tightened upon said arm-section to an extent to prevent the arm-section from swinging too freely. As a means for tightening up the unthreaded portion or bearing 4^a upon the unthreaded portion 7 of a bracket-arm section the tubular coupling-section can be split along its said unthreaded portion, as at 8, Figs. 1 and 5, and provided with lugs 9, arranged in pairs at opposite sides of the split and adapted to form threaded bearings for tightening-screws 10, which can be adjusted so as to tighten or loosen the coupling-section upon the bracket-arm sec-

tion. The bracket-plate can be secured to a wall or other fixture, and in order to permit the wires 12 and 13 to enter the hollow bracket-arm the bracket-plate is made hollow or cup-shaped and conveniently provided with openings 14 for the wires which extend through the hollow bracket-arm, so as to supply the lamp.

From the foregoing it will be seen that the construction set forth provides a jointed swinging bracket in which the joint comprises a loose threaded connection, which is employed simply to prevent disconnection of the parts, and that the engaging bearing portions of the joint are smooth and have frictional contact with one another and are caused to bind to a proper degree by means for adjusting them together; also, that the wear and strain comes on such smooth bearing-surfaces, and hence that the life of the bracket is prolonged, since the integrity of its joint is not dependent upon a threaded connection.

In place of lugs 9 and screws 10 as a means for tightening up the split portion of the coupling-section 3, I may thread the same, as at 26, Figs. 3 and 6, and arrange on such threaded portion a nut 27, which when screwed down will serve to contract said split end of the coupling.

What I claim as my invention is—

1. A jointed swinging incandescent-lamp bracket comprising the tubular arm-sections 1 and 2, connected together by a bent or elbow coupling-section rigid at one end with the end of one arm-section 3 and forming at its opposite end a socket, in which the other arm-section is fitted so as to turn, and thereby permit it to be swung in order to adjust the position of the lamp, the said coupling-section being formed with smooth and threaded wall portions respectively engaging unthreaded and threaded portions of one of the arm-sections, and means, substantially as set forth, for adjusting and clamping together the said unthreaded portions of the socket and arm section, the threaded connections between said members being in loose engagement with one another, so as to permit one arm-section to be swung independently of the other arm-section and with a degree of freedom proportionally to the degree with which the unthreaded portions of the coupling-section and independently-swinging arm-section are clamped together, substantially as set forth.

2. An incandescent-lamp bracket comprising, in combination, the swinging tubular arm-section 1, the tubular arm-section 2, connected with section 1 so as to swing independently thereof, and a bent tubular coupling-section 3, rigid at one end or section and forming at its opposite end a socket, in which the end of section 2 is fitted to turn, so as to allow said section to swing, the socket being provided with unthreaded and threaded portions 4^a and 5, respectively engaging unthreaded and threaded portions of section 2, and means arranged, substantially as set forth, to permit the unthreaded portions of the socket-and-arm connection 2 to be adjustably clamped together, but to leave a loose connection between the threaded portions of the socket-and-arm section.

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