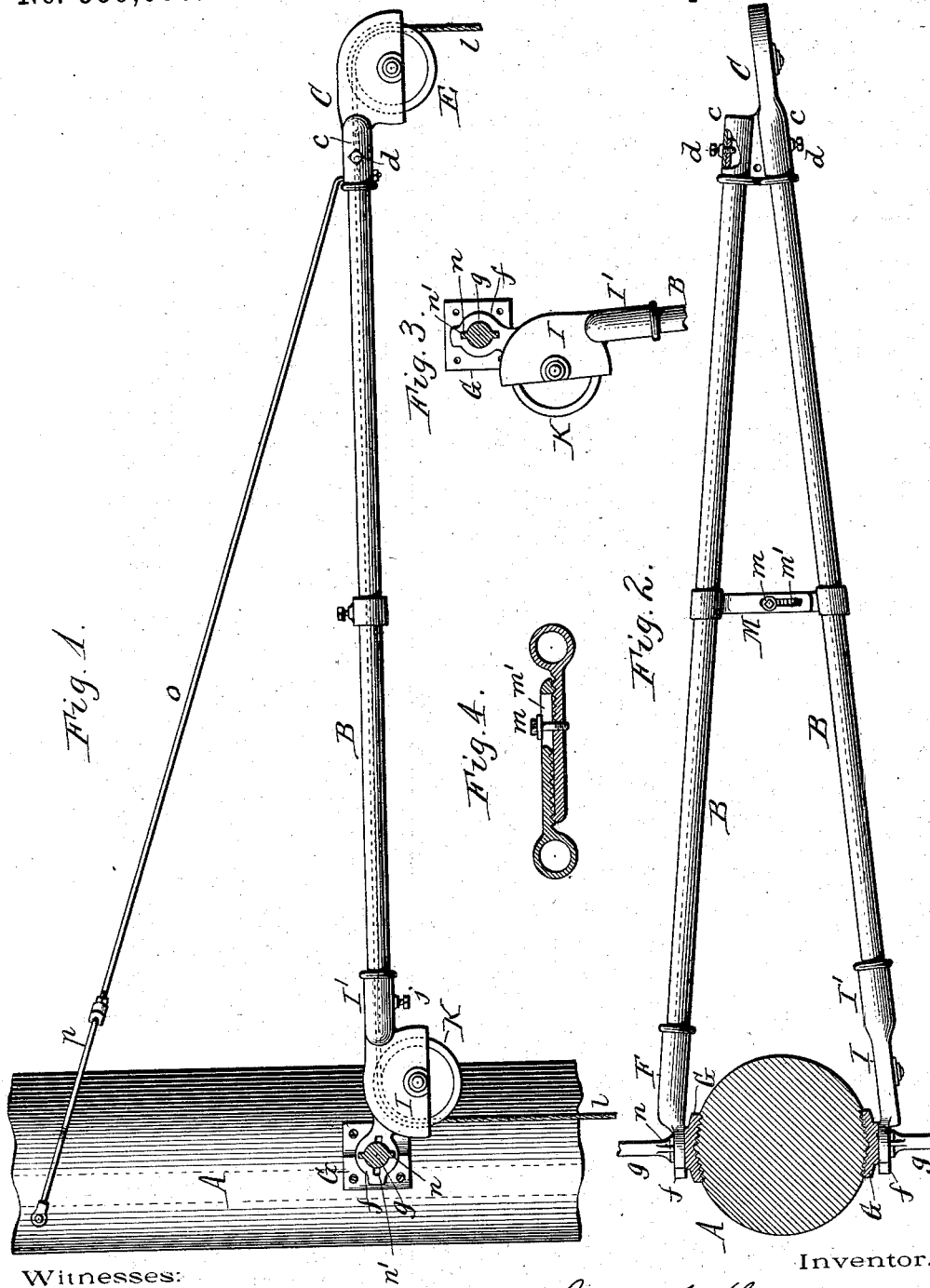


(No Model.)

J. J. SHICKLUNA.
MAST ARM FOR ELECTRIC LAMPS.

No. 559,066.

Patented Apr. 28, 1896.



Witnesses:

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MAST-ARM FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 559,066, dated April 28, 1896.

Application filed April 29, 1895. Serial No. 547,450. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH J. SHICKLUNA, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Mast-Arms for Electric Lamps, of which the following is a specification.

This invention relates to the overhanging mast-arms or brackets from which electric lamps are suspended.

My invention has for its objects to produce a light, strong, and durable mast-arm which can be cheaply manufactured, and which can be readily applied to a post and also adjusted to posts of different sizes.

In the accompanying drawings, Figure 1 is a side elevation of my improved mast-arm applied to a post. Fig. 2 is a top plan view thereof. Fig. 3 is a fragmentary side elevation, showing the arm swung down into its abnormal or unlocked position. Fig. 4 is a longitudinal section, on an enlarged scale, of the yoke of the mast-arm.

Like letters of reference refer to like parts in the several figures.

A represents a post to which the mast-arm is attached. This arm consists of a pair of forwardly-converging members BB, arranged side by side and connected at their front ends by a head C, consisting, preferably, of a pulley-casing. The latter is formed with rearwardly-extending sockets *c c*, which receive the front ends of the converging members, the members being confined in the sockets of the pulley-casing by set-screws *d* or other suitable fastenings.

E is the front or outer guide-pulley of the mast-arm, which is journaled in the casing C.

The side members of the mast-arm are provided at their rear ends with eyes or bearings *f*, which receive horizontal pins or pivots *g*, projecting from diametrically opposite sides of the post. These pivots are preferably formed on base-plates G, secured to the post by screws. The eye of one of the side members of the mast-arm is formed on a socket F, which receives the rear end of said member, while the eye of the other member extends rearwardly from a pulley-casing I, formed on its front side with a socket I', which receives the rear end of the adjacent member. The rear ends of the side members

are confined in their sockets by set-screws *j* or other suitable fastenings.

K is the inner or rear guide-pulley of the mast-arm, which is journaled in the casing I, and *l* is the cord or cable which passes over said pulley and the front guide-pulley E and from which the electric lamp is suspended in a well-known manner. The side members of the mast-arm are constructed of gas pipe or tubing, and the suspension-cord *l* passes through the hollow member connected with the two pulley-casings, as shown by dotted lines in Fig. 1.

M represents a yoke or bridge which connects the side members of the mast-arm at or near their middle and whereby this portion of the arm is stiffened. This yoke consists of two sections which are made lengthwise adjustable on each other, preferably by a clamping-bolt *m*, secured to one section and passing through a longitudinal slot *m'*, formed in the other section, as shown in Fig. 4. Each yoke-section is formed at its outer end with a sleeve, which embraces the adjacent side member. The contiguous surfaces of the yoke-sections may be roughened or serrated and each section formed with one or more teeth, which interlock with the serrations of the other section, as shown in Fig. 4, so as to reliably hold the sections against longitudinal movement on each other. Upon loosening the clamping-bolt of the yoke-sections the side members of the mast-arm can be further spread apart or contracted to a certain extent to fit posts of different diameters, the members possessing sufficient elasticity to permit their being sprung to the required extent. After engaging the eyes of the side members with the pins or pivots of the post and properly adjusting the same to the post the clamping-bolt of the yoke is tightened.

The inner and outer pulley-casings are arranged in line with each other or at the same angle, as shown in the drawings, so that the suspension-cord extends in a straight line from one guide-pulley to the other.

The eyes of the side members are preferably locked removably upon their pivots by the following means:

Each pivot is provided on the outer side of the adjacent eye with radially-projecting lugs

n , and the eye is provided within its bore with notches n' , which are arranged to break coincident with the lugs of the pivot, so as to retain the eye upon the pivot in the normal horizontal position of the mast-arm, as shown in Fig. 1, but which register with the lugs of the pivot when the mast-arm is swung down into the position shown in Fig. 3, so as to permit the eyes to be removed from the pivots. Before applying the side members to the pivots or removing them therefrom the clamping-bolt of the stiffening-yoke is loosened to allow the necessary spread of the members.

o is a supporting wire or cable whereby the mast-arm is sustained in its horizontal position and which extends from the head or pulley-casing C to a yoke p , which embraces the post above the mast-arm. The pivotal connection of the mast-arm with the post permits the arm to be adjusted vertically by shortening or lengthening its sustaining-cable o for raising the arm to the desired height and for bringing the lamp over the middle of a street.

My improved mast-arm can be constructed at comparatively small cost, as ordinary gas-pipe may be utilized for its side members and the remaining parts can be cast. Upon loosening the set-screws of the several sockets the parts of the mast-arm can be separated and compactly shipped. These set-screws preferably enter openings in the gas-pipe, as shown in Fig. 2, so as to reliably retain the same in the sockets.

I claim as my invention—

1. A mast-arm for electric lamps consisting of a pair of converging side members, an outer pulley-casing provided on its rear side with rearwardly-diverging sockets which receive

the front ends of said side members, an inner pulley-casing arranged at the rear end of the side member which is in line with the outer pulley-casing, and provided on its front side with a socket which receives the rear end of said side member and on its rear side with a bearing-eye, and a socket secured to the rear end of the other side member and provided on its rear side with a bearing-eye, said bearing-eyes being adapted to receive journals arranged on opposite sides of the post to which the mast-arm is attached, substantially as set forth.

2. A mast-arm for electric lamps consisting of a pair of converging side members, a head or casing connecting the outer ends of said members, eyes or bearings arranged at the rear ends of said members, and a yoke or bridge connecting the side members between said head or casing and said eyes or bearings and composed of sections made lengthwise adjustable on each other, substantially as set forth.

3. A mast-arm for electric lamps, consisting of a pair of converging side members, a head or casing connecting the outer ends of said members, eyes or bearings arranged at the rear ends of said members, and a yoke or bridge connecting the side members between said head or casing and said eyes or bearings and composed of adjustable sections, one of which is provided with a longitudinal slot and the other with a clamping-bolt passing through said slot, substantially as set forth.

Witness my hand this 15th day of April, 1895.

JOSEPH J. SHICKLUNA.

Witnesses:

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