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

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Inventor:

Joseph J. Shickluna
By Wilhelm Rommel

Attorneys:

Theo. L. Poppe
Henry J. Deck
To all whom it may concern:

Be it known that I, JOSEPH J. SHICKLUNA, a citizen of the United States, residing at Buf-
falo, in the county of Erie and State of New
York, have invented a new and useful Im-
provement 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 ap-
plied to a post. Fig. 2 is a top plan view
thereof. Fig. 3 is a fragmentary side eleva-
tion, 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 B B, 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 re-
ceive the front ends of the converging
members, the members being confined in the sock-
ets 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 pro-
vided 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 mem-
bers 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 ex-
tends 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
rubber, 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 con-
nects the side members of the mast-arm at
or near their middle and whereby this por-
tion of the arm is stiffened. This yoke con-
ists of two sections which are made length-
wise 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 adja-
cent 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 serra-
tions 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-se-
ctions the side members of the mast-arm can
be further spread apart or contracted to a
certain extent to fit posts of different diam-
ters, the members possessing sufficient elastic-
ity to permit their being sprung to the re-
quired 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 tight-
ened.

The inner and outer pulley-casings are ar-
ranged 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 prefer-
ably 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

This invention is designed primarily for
the purpose of employing in connection with
electric lights.
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.

15 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, each 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, each 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:
CARL F. GEYER,
ELLA R. DEAN.