ABSTRACT: A mastarm bracket for signal lights which is vertically and laterally adjustable while maintaining a selected position on a column support.
SIGNAL MASTARM BRACKET
BACKGROUND OF THE INVENTION

Increased motor vehicle speeds and increased congestion on streets and highways bring about requirements for more accurately positioning signal lights for traffic control. Safety experts studying statistics have demonstrated that proper design of column-supported lighting and traffic signal lamps have a favorable impetus on accident avoidance.

Fixed lighting of streets and highways for traffic control is being modernized at an accelerating rate and many of the newer installations are requiring modern pole, shaft and column designs which require extensive changes in the mounting hardware for lighting and traffic control lamps. Maintenance of these lighting fixtures and the associated adjustments must be easily handled with a minimum of expense.

FIELD OF THE INVENTION

This invention is directed to the modern shaft, pillar and column configurations used for street and highway lighting and traffic control and particularly to mastarm brackets for adjusting in a plurality of angular and vertical positions the position and direction of light ray emission of lighting and signal lamps.

DESCRIPTION OF THE PRIOR ART

At the present time poles, shafts, columns and the like employed to support lamps and traffic signal lights are provided with mastarm brackets which are limited in adjustment possibilities so that once the column and mastarms are positioned the direction of the rays of the lamps used for lighting and traffic controls are fixed. These mastarms are formed before assembly at the site and consequently do not lend themselves to adjustments for taking care of particular conditions of the site or traffic conditions of that area.

SUMMARY OF THE INVENTION

In accordance with the invention claimed an improved mastarm bracket is provided employing an assembly of parts which when used in the claimed combination provide vertical and lateral adjustment of the lamps heretofore not possible at the site.

It is, therefore, one object of this invention to provide an improved mastarm bracket.

Another object of this invention is to provide an improved bracket for mastarms which provide vertical and lateral adjustment of any given vertical setting.

Further objects and advantages of the invention will become apparent as the following description proceeds and the features of novelty which characterize this invention will be pointed out with particularity in the claims annexed to and forming part of this specification.

BRIEF DESCRIPTION OF THE DRAWING

The present invention may be more readily described by reference to the accompanying drawing in which:

FIG. 1 is a view of the vertical column, crossarm, signal lamps and mastarm bracket forming a traffic signal pole and embodying the invention;

FIG. 2 is an enlarged cross-sectional view of FIG. 1 taken along the line 2-2; and

FIG. 3 is an enlarged exploded perspective view of the signal lamps and mastarm bracket.

DESCRIPTION OF PREFERRED EMBODIMENT

The present invention relates to mastarm brackets for signal lamps and lights adjustable mounted on pillars, poles, columns or the like for lighting and traffic control.

Referring more particularly to the drawing by characters of reference, FIG. 1 discloses a traffic signal pole 10 which is tended to be representative of any shaft, pillar, post or column vertically arranged or otherwise which is utilized to support and house wires, connections, control devices, lamps, traffic signal lights, and so forth for pedestrian and traffic comfort and control. The traffic signal pole 10 may comprise a hollow tapered steel shaft 11 having a base 12 and a top or capital 13.

A tapered hollow mastarm 14 is suitably secured to the top 13 of shaft 11 by means of an adjustable split bracket 15 of adequate strength, shape and size to support the mastarm 14 and is shown as being electric arc welded to the large end of the mastarm.

Suitable signal heads 17 are fastened to the mastarm at spaced intervals, as required, for supporting and positioning a plurality of traffic signal lamps or devices 18.

In accordance with the invention claimed, the signal heads 17 are each supported on a U-shaped clamp 19 comprised of a pair of tubular leg members 20 and 21 interconnected by a tubular or straight member 22. Leg member 20 comprises a union 23 having an elbow 24 threadedly mounted to it and the top end of member 22, as shown, and a second elbow 25. The free end of elbow 25 is connected to the top of signal head 17.

Leg member 21 comprises a T-shaped member 26 threadedly connected to the lower end of member 22 and to an elbow 27. Elbow 27 is connected at its other end to the lower end of signal head 17. Thus, signal head 17 may be rotatably mounted on an axis formed by elbows 25 and 27 substantially parallel to but spaced from the longitudinal axis of member 22. The other arm of the T of member 22 may be closed by a weatherproof wiring connector. Wires (not shown) are inserted through this connector into the signal head to provide electric current to lamps 18. The connector is tightened down upon the wire to prevent water from getting into the signal head.

As shown in FIGS. 2 and 3 a T-shaped member 29 is slidably mounted along member 22 and clamped in any given position along its length by set Screws 30. Leg 31 of member 29 is threadedly connected to a clamp or bracket 32 which is arranged for clamping around the mastarm 14.

Bracket 32 comprises a split member having two semicircular parts 33 and 34 each of which are provided with a pair of apertured ears 35 at diagonally disposed points. The ears on part 33 are positioned in juxtapositional relationship to ears on the part 34 for axially aligning the apertures in the ears so that suitable bolts 36 and nuts 37 may clamp the parts together around the mastarm 14. This bracket holds the signal hanging devices 17 at selected positions along the mastarm. Bracket 32 is also provided with a collar 38 for threadily engaging leg 31 of T-shaped member 29.

Thus, a simple arrangement is provided for hanging signal devices 17 which permits lateral movement along the mast arm 14, vertical movement of devices 17 axially of the vertical shaft 11 and lateral movement to the vertical axis of shaft 11 by simple adjustments while the devices are pole mounted.

While, in accordance with the provisions of the statute, there has been illustrated and described the best form of the invention known, it will be apparent to those skilled in the art that changes may be made in the structure described without departing from the spirit of the invention as set forth in the appended claims.

What I claim is:

1. A pole-supported electrical device comprising:
   a lamp fixture, and
   a bracket for securing said fixture to a mastarm, said bracket comprising
   a U-shaped clamp providing a pair of spacedly arranged legs interconnected by a straight member, said fixture being rotationally mounted between said legs,
   a T-shaped member slidably mounted on said straight member for adjustably positioning at a given place along said straight member,
   a mastarm clamp comprising two cooperating parts for surrounding said mastarm, fastening means for holding said parts together around said mastarm, and
means for rotatably connecting one of said parts to the leg of said T-shaped member.

2. The combination set forth in claim 1 wherein said cooperating parts are semicylindrical.

3. The combination set forth in claim 1 wherein said fixture is pivotally mounted between said legs for rotation about an axis parallel to the longitudinal axis of said straight member.

4. The combination set forth in claim 1 wherein said fastening means comprises apertured ears on each of said cooperating parts of each receiving a nut and bolt clamping said parts around said mastarm.