

Oct. 13, 1942.

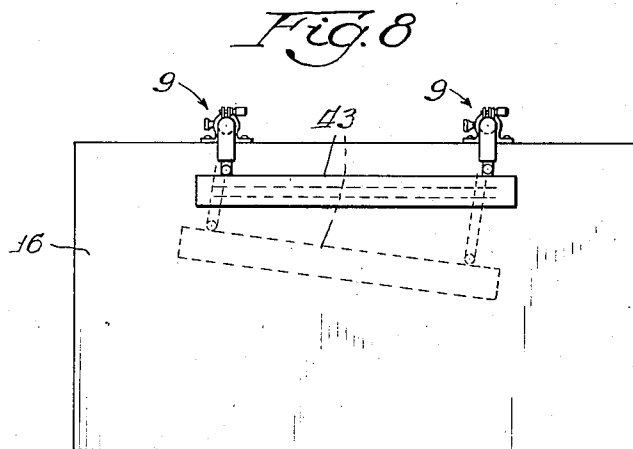
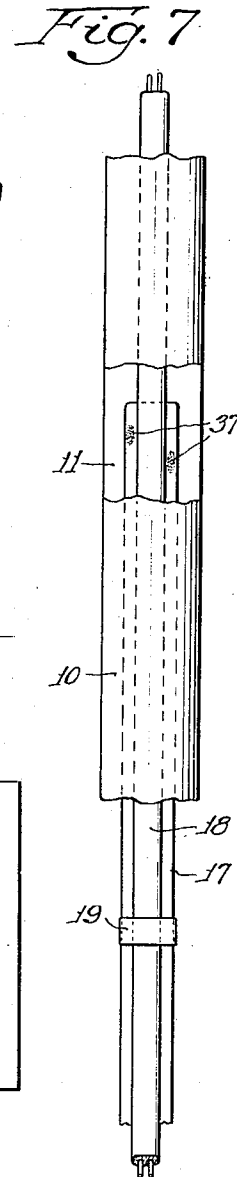
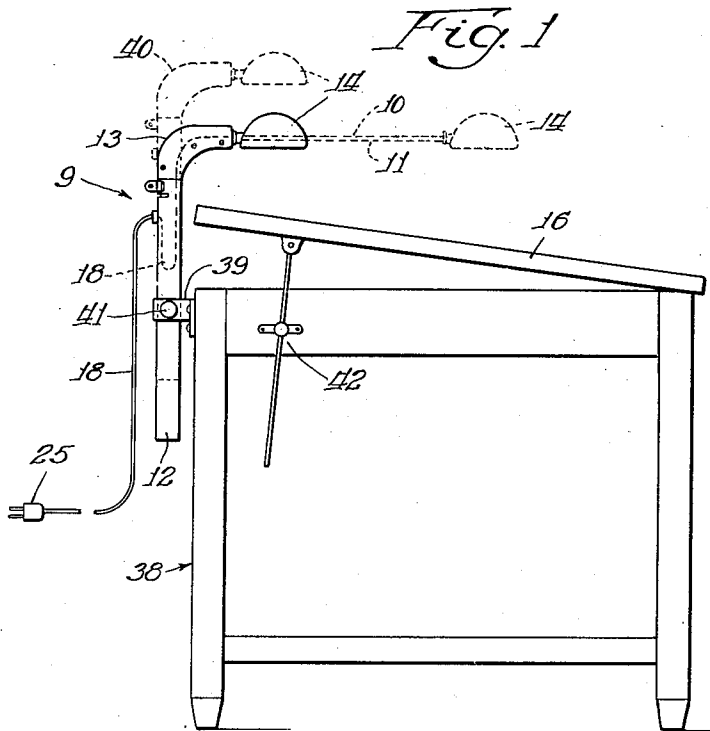
H. L. DE LISLE

2,299,008

EXTENSION DEVICE

Filed May 19, 1941

2 Sheets-Sheet 1



Inventor:
Harold L. DeLisle

By: A. Trevor Jones
Att'y.

Oct. 13, 1942.

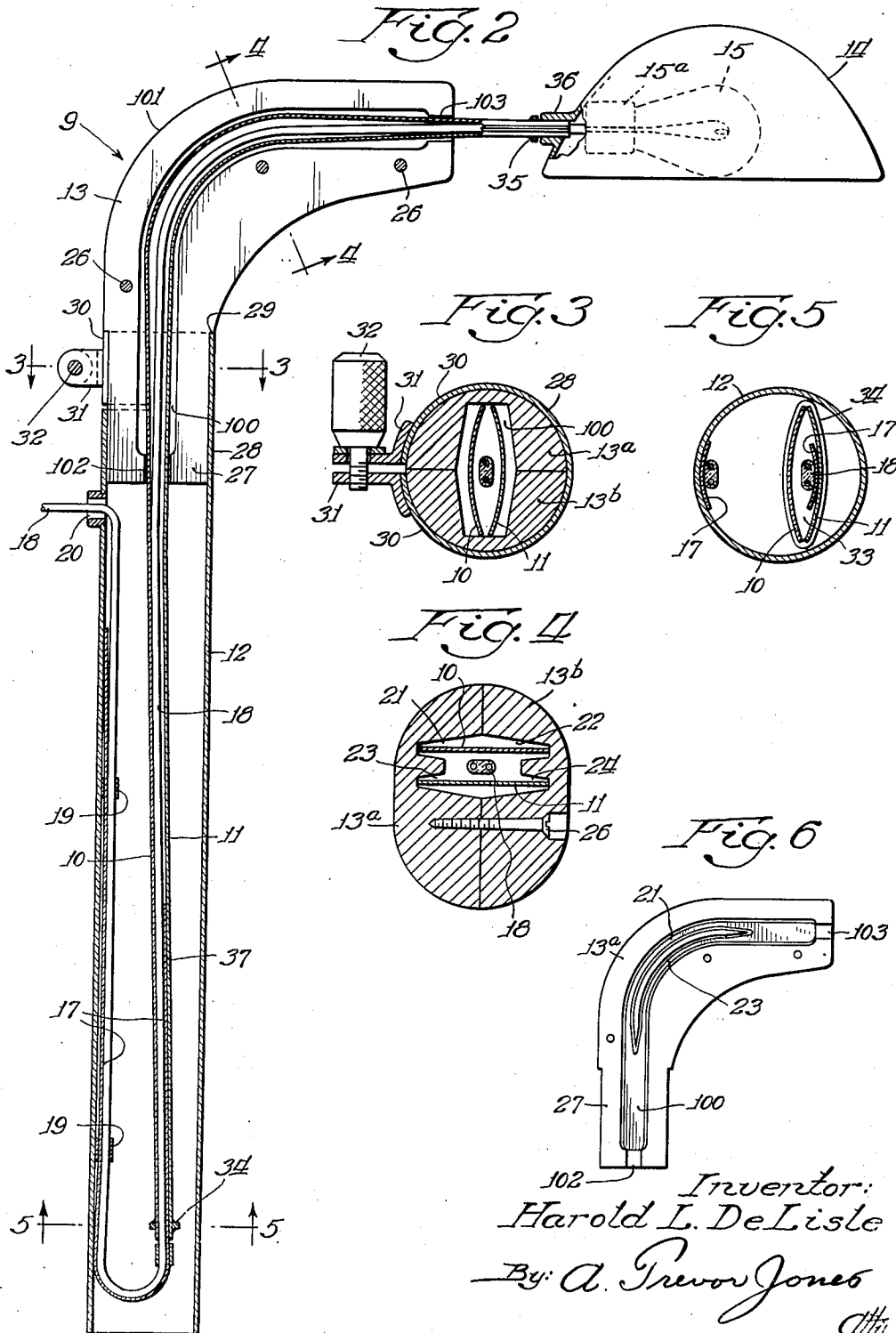
H. L. DE LISLE

2,299,008

EXTENSION DEVICE

Filed May 19, 1941

2 Sheets-Sheet 2



UNITED STATES PATENT OFFICE

2,299,008

EXTENSION DEVICE

Harold L. De Lisle, Sheboygan, Wis.

Application May 19, 1941, Serial No. 394,055

4 Claims. (Cl. 248—285)

This invention relates to improvements in extension lamp devices more particularly of the class embodying a metallic tape of naturally arcuate cross-section.

The invention pertains especially to such devices in which the direction of a pair of such tapes is desired to be changed between the housing therefor and an article supported thereby, and has marked utility when adapted for use with an article such as a lamp for illuminating the drawing board of a draftsman's table or the like.

Other objects and advantages will be apparent from the following description, taken together with the accompanying drawings, in which—

Figure 1 is a side view of a draftsman's table with my invention associated therewith and showing in dotted lines two of many different selective adjustments thereof;

Figure 2 is an enlarged axial view chiefly in section, through the device shown associated with the table in Fig. 1;

Figure 3 is a cross-section still further enlarged and taken on the line 3—3 of Fig. 2;

Figure 4 is another cross-section on the scale of Fig. 3 but taken on the line 4—4 of Fig. 2;

Figure 5 is another cross-section on the same scale taken on the line 5—5 of Fig. 2;

Figure 6 is a separated view, somewhat reduced, of the elbow half part shown in Fig. 2 without the tapes;

Figure 7 is a fragmentary enlarged plan view of the tape, a flexible strip and a light cord together; and

Figure 8 is a modification showing two of the devices supporting an article such as an elongated lamp between them, and shown associated with the drawing board, somewhat reduced.

Referring in detail to the illustrative embodiment shown in the drawings, my improved extension device 9 includes a pair of steel tapes 10 and 11, indicated diagrammatically in Fig. 1, are superposed as best shown in longitudinal section in Fig. 2 and in cross-section in Figs. 3 and 5, from which latter the natural inherent arcuation of the tapes is indicated. The concavities of the tapes are preferably face to face. The tapes are here shown soldered together at their ends as at 34 and 35 at each end but along their longitudinal edges are unsecured to each other so that they may flatten out to turn a corner. As here shown, the tapes 10 and 11 extend upwardly from the housing 12 through the elbow 13, where the direction of their axis is changed from vertical to horizontal and the tapes terminate at the article 14, which is here a lamp having the incandescent bulb 15 therein for illuminating the drawing board 16, the lamp 14 being supported by the steel tapes 10 and 11,

their concavity giving them a rigidity for this purpose, as by a well known beam effect.

The housing 12 which is desirably hollow for a substantial part if not all of its length, receives the inner end of the tapes 10 and 11 therein to a greater or less extent as presently more particularly described. In this instance, connected to the inner end of the tapes 10 and 11 is a metal flexible strip 17 of greater flexibility than the tapes 10 and 11 and which is adapted to be bent upon itself in the housing 12 and to constitute a leader for the light cord 18 which may be tied thereto as by straps 19. The light cord is first carried by the flexible strip 17, lying along the face of the latter as best shown in Fig. 7, and then by the steel tapes 10 and 11, lying between the latter, the natural concavities of the tapes forming a conduit 33 for the light cord. The housing 12 may have an inlet 20 for the light cord 18. The flexible strip 17 may be soldered as at 37 or otherwise suitably secured to the tape 11, for example, on the inner concave side of this tape so as to be also within the conduit 33.

In the extended position of the tapes 10 and 11 as shown in dotted lines in Fig. 1, the lamp 14 is adjusted horizontally to a position relatively far forward over the drawing board 16, and in this case the steel tapes are almost entirely withdrawn from the housing 12 and the flexible strip 17 occupies a position somewhat as indicated in dotted lines in Fig. 1, as contrasted with the position of the flexible strip 17 when the tapes are retracted as shown in Fig. 2. The position of the inlet 20 at the upper end of the housing 12 permits this extension of the flexible strip 17 or its doubling upon itself to accommodate the inward and outward movements of the tapes desirably without moving the light cord back and forth in the inlet 20.

The elbow member 13 is advantageously formed of a molded initially plastic material and is split axially into two halves 13a and 13b, the halves having the passage 100 extending jointly axially therethrough and this passage is desirably bifurcated in the vicinity of the corner 101 of the elbow member which occurs as the axis of the latter is changed in direction. To form this bifurcation of the passage 100, the elbow member halves 13a and 13b have mating channels 21 and 22, for the tape 10, and 23 and 24 for the tape 11, these channels serving to separate the tapes as they turn the corner in their passage through the elbow member 13 so as to maintain a space therebetween for the light cord 18, which, as will be now understood, runs continuously from the plug 25 to the socket 15a for the incandescent bulb 15 of the lamp 14, and also so as to cause the tapes to flatten out to permit their turning of the corner as best seen in Fig. 4. The split-

ting of the elbow member as described, permits ready threading of the tapes and light cord therethrough and the halves 13a and 13b may then be firmly held together as by screws 26. The lower end of the elbow member 27 is cylindrical and is rotatably received in the upper end 28 of the housing 12, a reduction in the diameter of the part 27 of the elbow member providing a shoulder 29 which limits downward movement of the elbow member in the housing. The upper end of the housing is conveniently formed with a pair of tongues 30 each quarter-cylindrical and provided with lugs 31 which lugs have the thumb-screw 32 passing threadedly therethrough to clamp the elbow member snugly but rotatably in the housing.

The ends of the passage 100 through the elbow member are desirably reduced in cross-section as at 102 and 103 respectively, to bring the tape members 10 and 11 together again as they emerge from the elbow member with the light cord 18 therebetween. The ends of the tapes may be secured together as by soldering, at 34 at their inner end, and at 35 at their outer end, at which latter end they pass into the sleeve 36 of the lamp 14 and are firmly secured therein by any appropriate means in supporting relation thereto.

When the device is carried by a base or table 33 upon which the drawing board 16 is mounted, as here shown, the table may have a bracket 39 through which the housing 12 passes and in which the housing may be vertically adjustable as indicated in dotted lines at 40, Fig. 1, to raise or lower the lamp 14, a hand clamp 41 being provided on the bracket 39 for fixing this adjustment selectively.

As the angle of the drawing board 16 with reference to the table may be adjustable by a well known device illustrated at 42 and not necessary to be here further described, the elevation of the lamp 14 with respect to the board may thus be also adjusted, as well as, in accordance with the present invention, the position horizontally of the lamp, by means of retracting or extending the tapes 10 and 11 on which the lamp 14 is supported. It will be understood that the rigidity of the tapes provided by their concave cross-section permits the supporting of the lamp by the tapes without drooping of the lamp. Thus, a minimum of parts extend over the drawing board. At the same time, by reason of the rotatability of the elbow member 13 and cooperation of the tapes therewith, any desired angle of the lamp 14 may be obtained. By means of my invention, the time and convenience of the draftsman is served.

As shown in Fig. 8, my invention may be readily adapted to an elongated lamp 43, of, for example, the well known popular fluorescent type, and in this instance there may be two of the extension devices 9, the lamp 43 being supported between and by both of the devices jointly, while being still adjustable generally as described with reference to Figs. 1 to 7.

Such changes may be made as fall within the scope of the following claims without departing from the invention.

Having described my invention, I claim:

1. In an extension lamp device, the combination of a pair of superposed steel tapes having a naturally slightly arcuate cross-section, an electric light cord disposed between said tapes throughout, an elbow member having a bore therethrough for the passage of the tapes, said elbow changing the direction of the tapes and at the same time permitting the passage of the cord

therethrough, a housing connected to the elbow, the elbow being mounted rotatably thereon, said housing having a hollow portion adapted to receive the inner ends of said tapes in varying amounts when retracted the tapes therein resuming their naturally arcuate cross-section, and an electric lamp beyond the elbow at the outer ends of said tapes and supported thereby when the tapes are extended.

2. In an extension lamp device, the combination of a steel tape having a naturally slightly arcuate cross-section to produce a beam effect but flexible when flat, an elbow member having a bore therethrough for the passage of the tape, said elbow member being adapted to flatten and change the direction of the tape, a tubular housing connected to the elbow, said housing being adapted to receive the inner end of the tape in varying amounts when retracted, a flexible strip attached to the inner end of the tape of greater flexibility than the tape whereby to be bent upon itself when the tape is retracted within the housing, an electric light cord passing through the housing carried by the strip, and a lamp on the outer end of said tape and supported thereby when the tape is extended.

3. In an extension lamp device, the combination of a pair of superposed steel tapes having a naturally slightly arcuate cross-section to produce a beam effect but flexible when flat, an electric light cord disposed between said tapes throughout, an elbow member having a bore therethrough for the passage of the tapes said elbow member being adapted to flatten and change the direction of the tapes while at the same time permitting the passage of the cord therethrough, a tubular housing for the cord and rotatably mounting the elbow thereon, said housing having a hollow portion adapted to receive the inner ends of the tapes in varying amounts when retracted, a metallic flexible strip attached to the inner end of the tapes of greater flexibility than the tapes and carrying said cord between the place where the cord is disposed between the tapes and the place where the cord is admitted into the housing whereby to be bent upon itself with the cord when the tapes are retracted within the housing, and a lamp beyond the elbow on the outer end of said tapes and supported thereby when the tapes are extended.

4. In an extension lamp device, the combination of a plurality of pairs of superposed steel tapes having a naturally slightly arcuate cross-section, an electric light cord disposed between at least one of said pairs of tapes throughout, a pair of elbow members each having a bore therethrough for the passage of one of the pairs of the tapes, the tapes being adapted to be slidably moved in the elbow and said elbow changing the direction of the tapes and at the same time permitting the passage of the cord therethrough, a tubular housing connected to each elbow mounted in upright parallel relationship, the elbows being mounted rotatably thereon, said housings being adapted to receive the inner ends of said pairs of tapes respectively in varying amounts when retracted, and an electric lamp disposed transversely at the outer ends of said tapes jointly and supported thereby when the tapes are extended, whereby the elbows may be disposed either in parallel one with the other or out of parallel to accommodate selective positions of the lamp.

HAROLD L. DE LISLE.