Aug. 1, 1933. D. GRBOVIC 1,920,555

NEON TUBE SIGN

Filed March 24, 1932

Fig. 1.

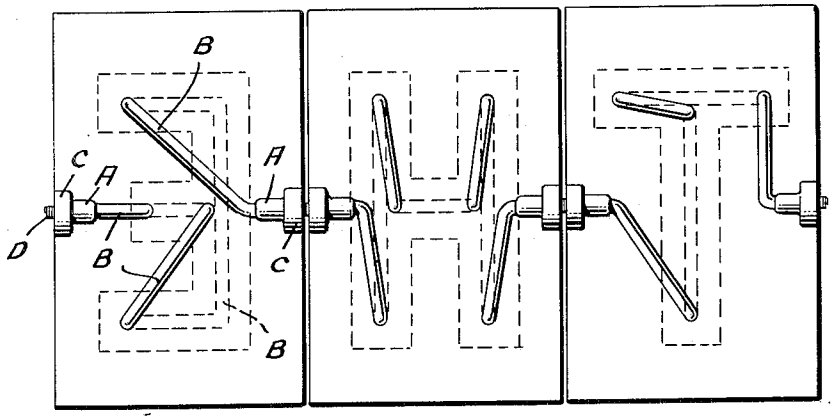
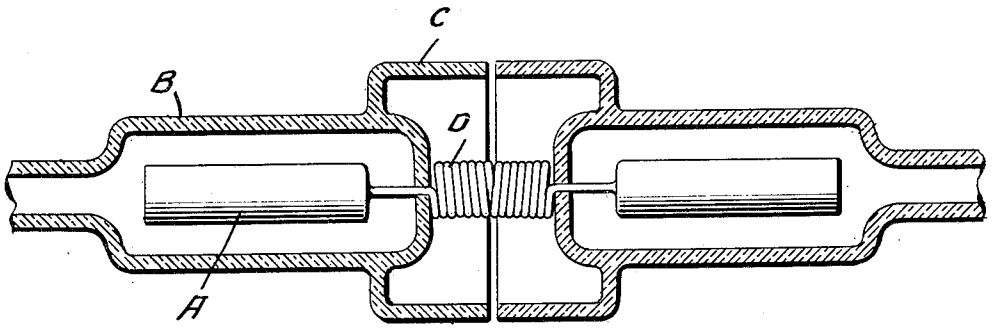


Fig. 2.



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NEON TUBE SIGN

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3 Claims. (Cl. 40—130)

My invention is an improvement in luminous gas tube signs.

The object of my invention is to permit the change of the wording or the letters of a luminous gas tube sign in such a way that certain letters or parts of the sign may be replaced by other letters or parts without removing the whole sign and that the electric circuit is again completed when the substitution is finished.

This object I obtain:

First, by having a separate tube unit for each character of the sign;

Second, by placing the electrodes of each unit in such a position that when the units are placed together end to end the wires of the electrodes will be automatically placed in contact with each other.

Third, by forming the ends of the electrode wires into coils so that they remain in contact with each other by their resilience.

The invention is illustrated in the annexed drawing of which

Figure I presents a rear view of a neon tube sign embodying my invention,

Figure II is a cross-section of two adjoining tube ends.

In the accompanying drawing, A indicates the electrode which is enclosed within an enlarged end of the tube B of a unit. Each tube is bent into a letter, figure or other character which is to form part of the luminous gas tube sign. The outer end of the enlarged end of each tube is extended to form an open collar C. The collars of two adjacent tubes are so positioned that they jointly form a chamber. The wires of the electrodes are passed through the ends of the tubes into the chamber formed by the collars. Here each wire is formed into a coil D which extends somewhat beyond the end of the open collar. Due to this construction, the electrode wires of adjacent tubes remain in contact with each other when enclosed within the chambers formed by the collars when the tube units are placed end to end.

As shown in Figure I, each letter-forming tube is supported on a plate or similar structure. The plates carrying the tubes are placed edge to edge. Those parts of each tube which form the character proper are on the front side of the plate. At each end of the character the tube is passed through the plate, and the remainder of the tube as well as the electrodes are carried on the back of the plate.

The following is claimed as my invention:

1. A luminous gas tube sign formed of separate tubes, each tube bent into the outline of a character, a separate support for each tube, the ends of each tube being so positioned that the ends of adjacent tubes are in register and in substantial contact with each other, the wire of each electrode being extended through and beyond the tube end and bent into such a form that the wires of adjecent tubes are in contact with each other and form an automatic electrical connection when the tubes are placed end to end.

2. An electrical connection between two luminous gas tubes comprising, an enlargement formed on the end of each tube, an electrode in each enlargement, a resilient wire extending from the electrode and passed through and beyond the outer end of the enlargement, the outer end of the wire being bent into a coil engaging the coil of the other wire and means forming an enclosure for said coils.

3. An electrical connection between two luminous gas tubes comprising an enlargement formed on the end of each tube, an electrode in said enlargement, a resilient wire extending from the electrode and passed through and beyond the wall of the enlargement, the outer end of the wire being bent into a coil, engaging the coil of the other wire, an integral open collar formed on the enlargement of each tube, said enlargements cooperating to form an enclosure of said contacting coils.

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