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R. H. MANSON

VACUUM TUBE SOCKET

Filed Aug. 26, 1925

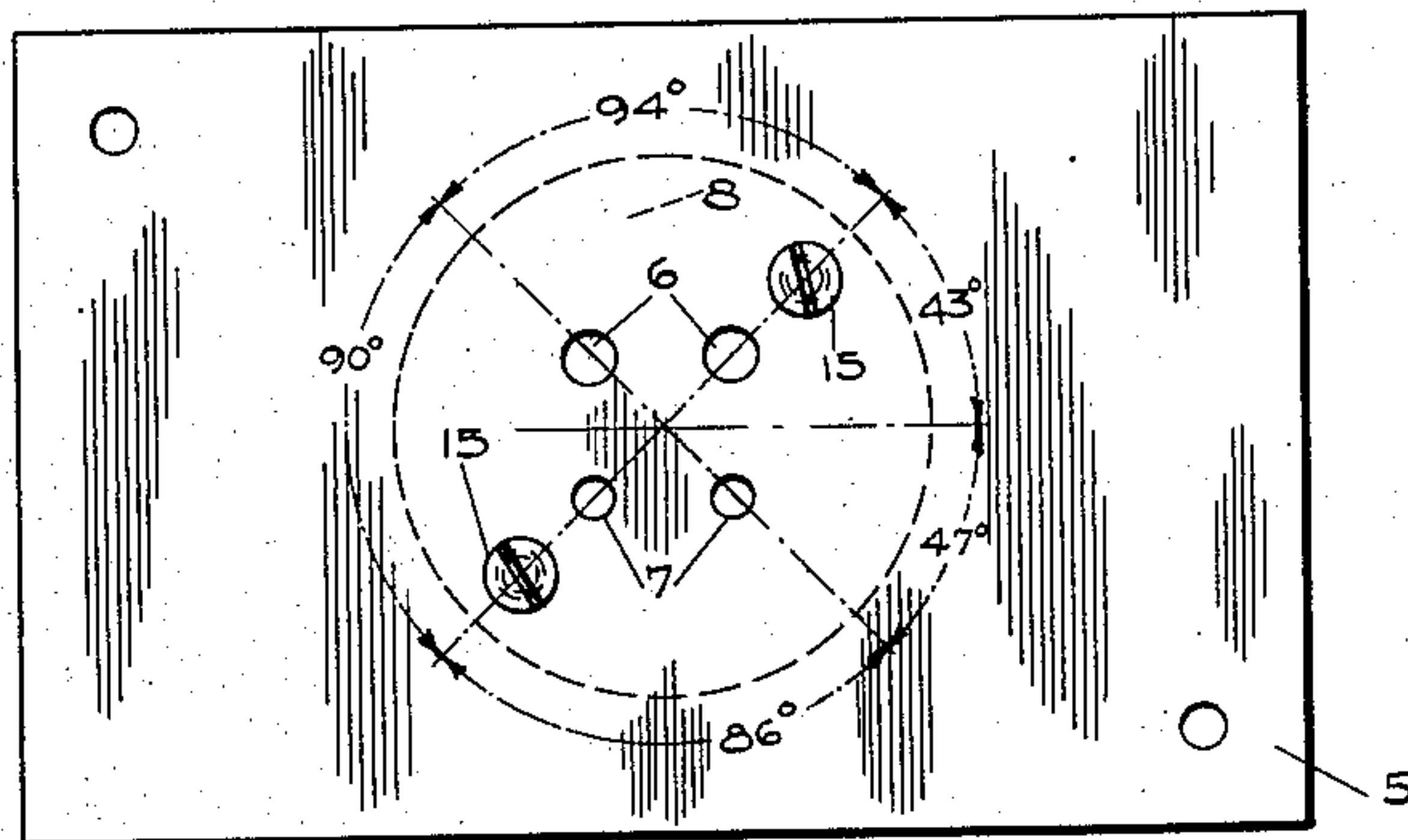


FIG. 1

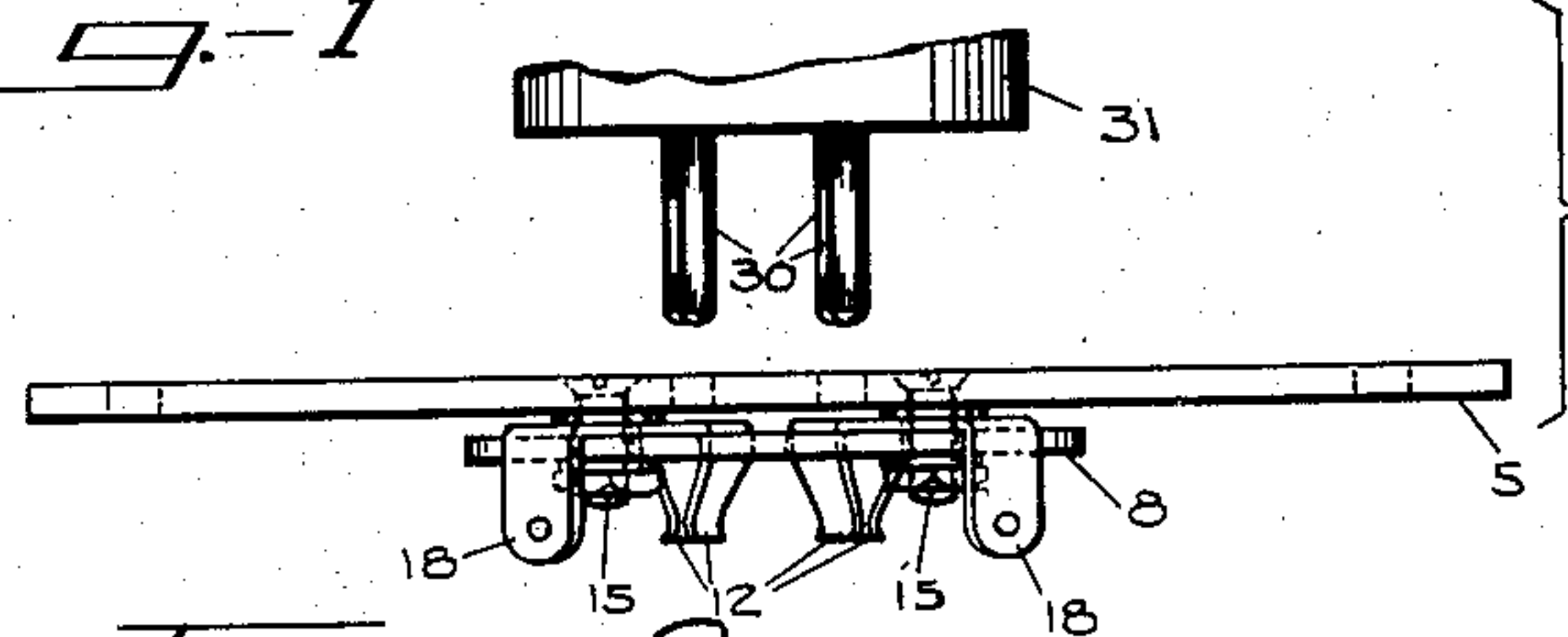


FIG. 2

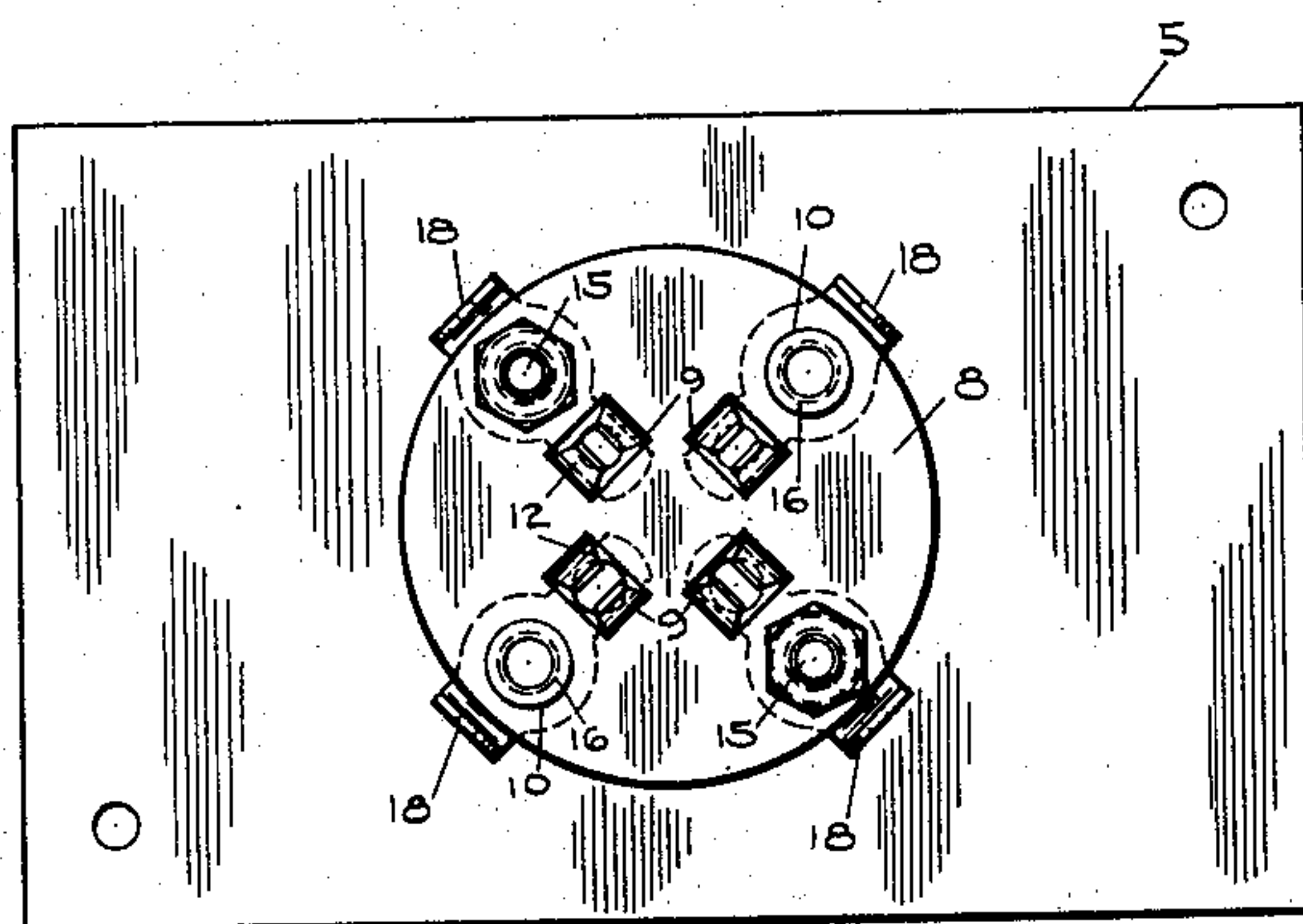


FIG. 3

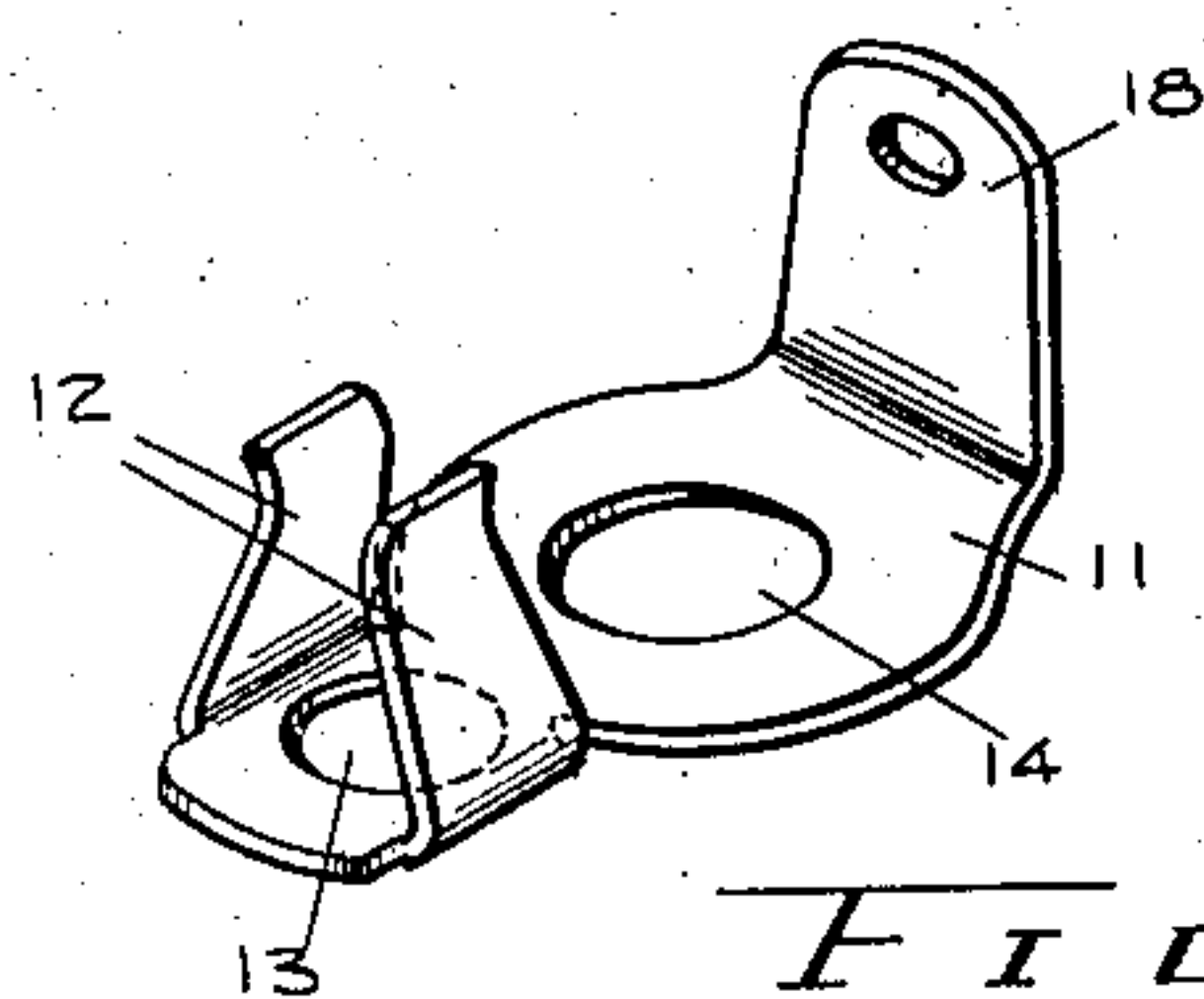


FIG. 4

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VACUUM-TUBE SOCKET.

Application filed August 26, 1925. Serial No. 52,675.

This invention relates to sockets for electrical devices and more particularly to sockets for use in connection with vacuum tubes.

Tube sockets of the prior art have been expensive to manufacture, are bulky for shipment and require a large amount of space in a radio cabinet.

It is the purpose of the present invention to provide a vacuum tube socket, which is simple and inexpensive to manufacture, and which requires a minimum amount of space.

Referring to the drawings, Fig. 1 represents a top view of a shelf on which the socket is mounted. Fig. 2 shows a side view of the shelf with a socket mounted thereon and a portion of a vacuum tube for use therewith. Fig. 3 is a bottom view of the shelf and socket, while Fig. 4 is a view of a terminal for use in the socket.

In the drawings, 5 designates a shelf which may be part of a radio set or other device in which vacuum tubes are mounted. Near the center of this shelf there are provided two large holes 6 and two small holes 7, which are spaced as indicated in Fig. 1. These openings are of such size and are spaced at proper distances to receive similar sized and correspondingly spaced contacts 30 of a vacuum tube 31 partially shown in Fig. 2. On the lower side of the shelf 5, there is mounted a socket, which consists of a disk 8 of insulating material, provided with four rectangular openings 9 and four round openings 10 to receive four terminals 11 of conducting material of the form shown in Fig. 4. Each of these terminals is apertured at 13 and is provided with a pair of prongs 12 adjacent said aperture for insertion in the openings 9. Other openings 14 in the terminals register with the four round openings 10 in disk 8 when the terminals 11 with their prongs 12 are inserted in the rectangular openings of the disk. These terminals are held in fixed relation by eyelets passing through openings 10 in the disk 8 and openings 14 in terminals 11, while bolts 15 passing through openings 15 and shelf 5 and through eyelets 16, hold the socket in spaced relation with respect to the shelf 5. Lugs 18 on terminals 11 provide a convenient surface to which electrical conductors may be soldered.

In use, a pair of prongs 12 of a terminal

11 engage opposite sides of each contact 30 when the vacuum tube 31 is inserted in the socket from which it will be recognized that the prongs align themselves with respect to the contact with a minimum amount of tension or distortion on the body of the terminal 11.

What I claim is:

1. In combination with a support having openings of different areas to receive the terminals of a vacuum tube, a disk of insulating material having a plurality of rectangular and circular openings, said rectangular openings being in registry with said first mentioned openings, terminals mounted between said support and said disk, resilient prongs on each terminal and projecting through the rectangular openings in said disk, each of said terminals having a pair of openings therein, one of which is between said prongs and the other opening in registry with the circular opening in said disk, means passing through the circular openings in said disk and through the last mentioned openings in said terminals for securing said terminals to said disk, and means for securing said disk to said support.

2. In combination with a support having openings of different areas to receive the terminals of a vacuum tube, a circular plate of insulating material having pairs of radially positioned openings therein, the first opening of each pair being rectangular, said rectangular openings being in registry with said first mentioned openings, terminal strips mounted between said support and said plate, resilient prongs on each terminal strip shaped in rectangular form and projecting through the rectangular openings in said plate, each of said terminal strips having a pair of openings therein, one of which is between said prongs and the other opening in registry with the second opening in said plate, means passing through the second openings in said plate and through the last mentioned openings in said terminal strips for securing said terminal strips to said plate, and means for securing said plate to said support.

In witness whereof, I hereunto subscribe my name this 21st day of August, A. D. 1925.

RAY H. MANSON.