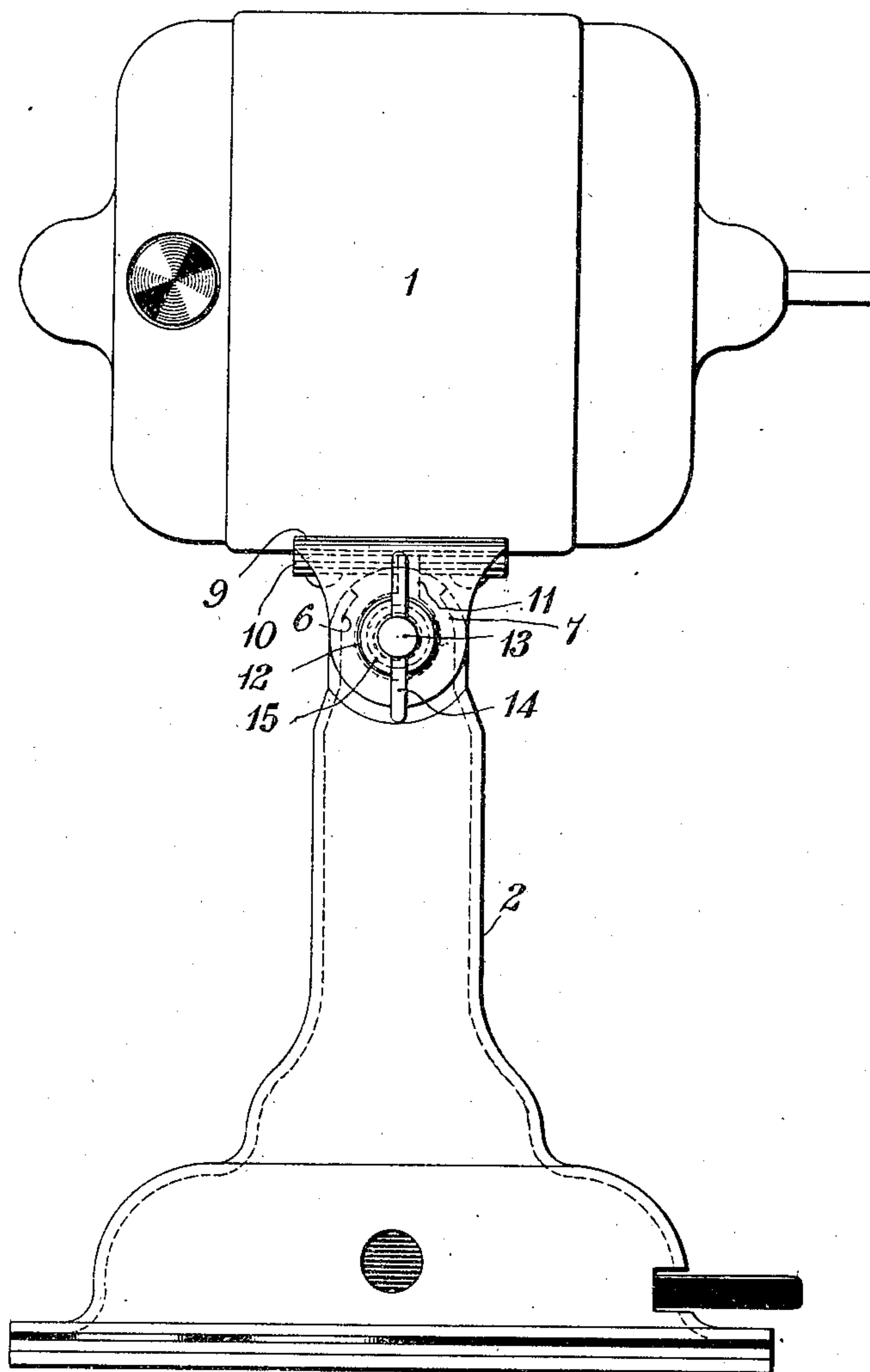


F. R. KUNKEL.
PIVOTAL CONNECTION.
APPLICATION FILED JAN. 10, 1908.

928,772.

Patented July 20, 1909.
2 SHEETS—SHEET 1.

Fig. 1.



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2 SHEETS—SHEET 2.

Fig. 2.

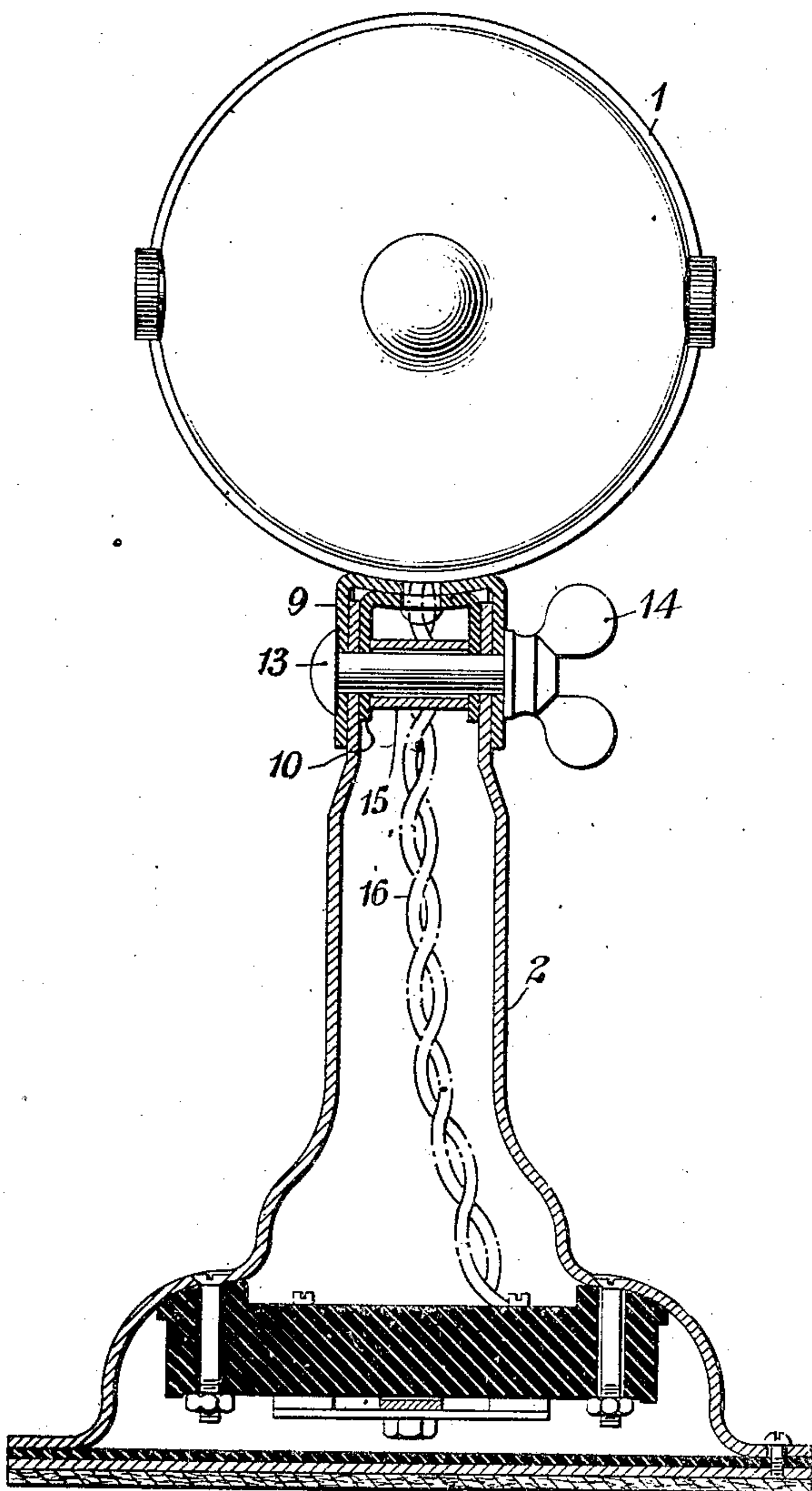


Fig. 3.

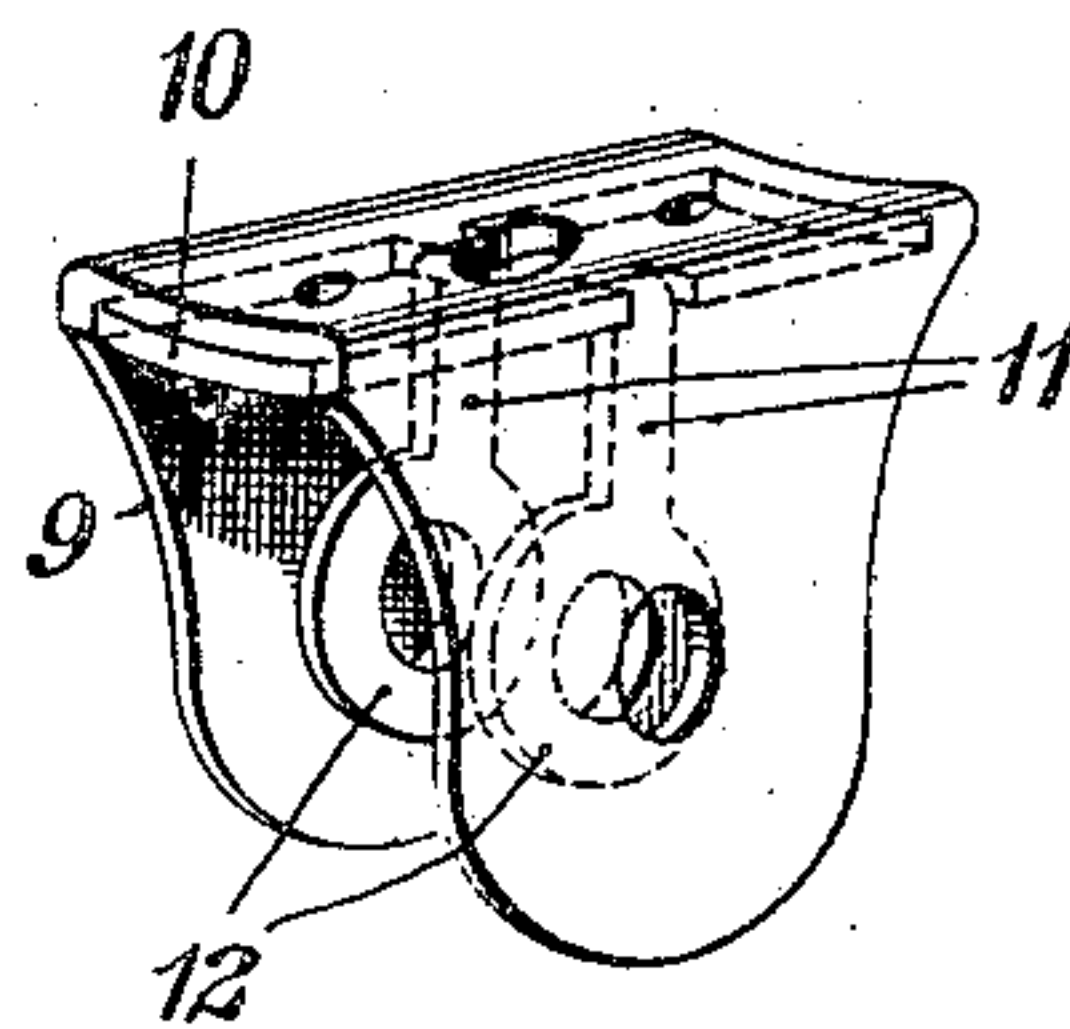
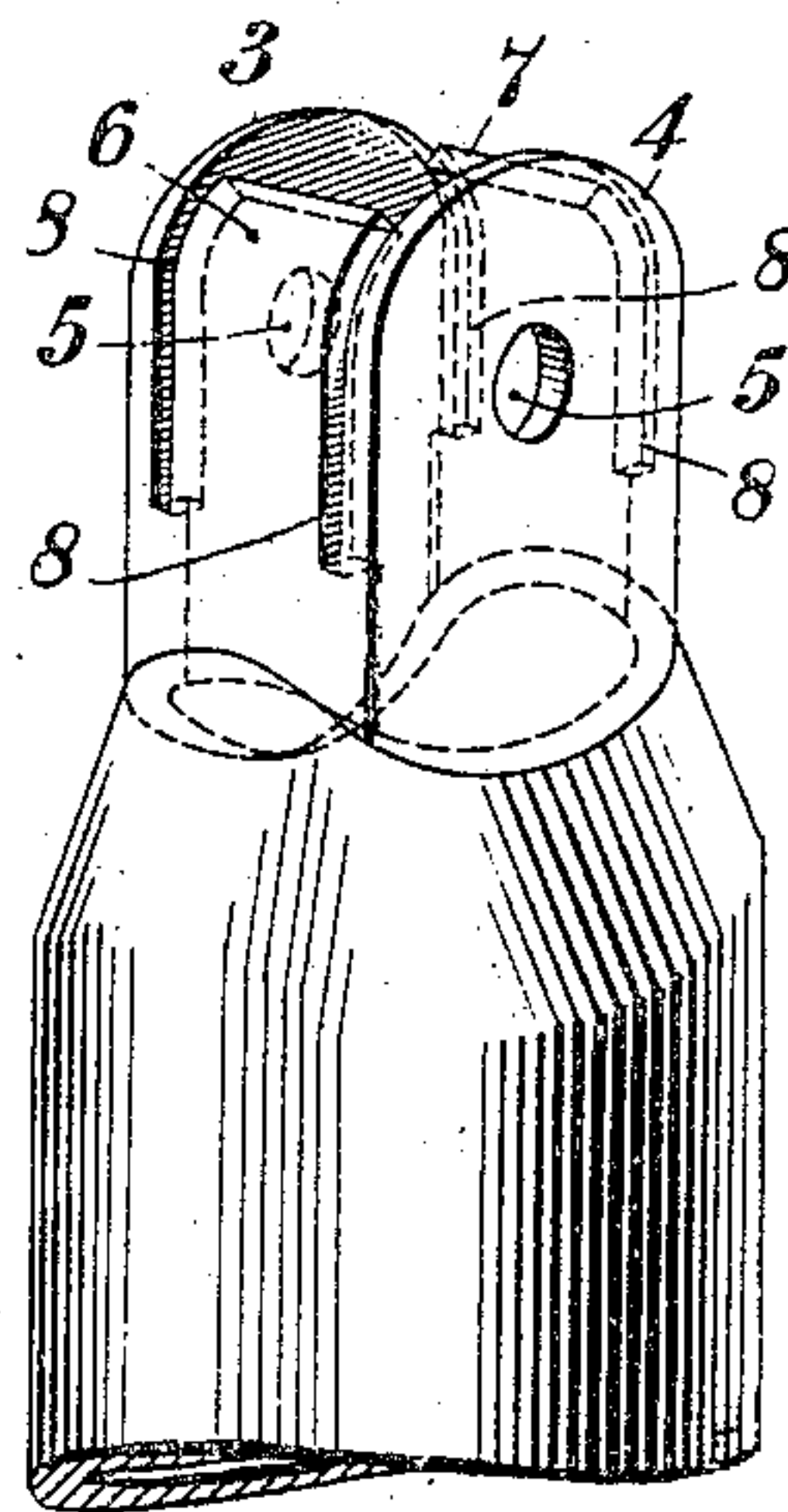


Fig. 4.



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UNITED STATES PATENT OFFICE.

FRED R. KUNKEL, OF EDGEWOOD PARK, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, OF EAST PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

PIVOTAL CONNECTION.

No. 928,772.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed January 10, 1908. Serial No. 410,222.

To all whom it may concern:

Be it known that I, FRED R. KUNKEL, a citizen of the United States, and a resident of Edgewood Park, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Pivotal Connections, of which the following is a specification.

My invention relates to pivotal connections, and particularly to such connections as are employed between fan motors and similar devices and supporting standards or brackets therefor.

The object of my invention is to provide a pivotal connection for the purpose indicated by means of which the motor or other device may be adjusted to, and securely clamped in, any desired position.

Figure 1 of the accompanying drawings is a view, in side elevation, of a motor and its supporting standard which embody my invention. Fig. 2 is a view, partially in section and partially in end elevation, of the parts shown in Fig. 1. Fig. 3 is a perspective view of certain of the parts of the pivotal connection between the motor and the supporting standard, and Fig. 4 is a perspective view of the upper end of the supporting standard for the motor.

An electric motor 1 (such, for example, as that constituting the subject-matter of another application Serial No. 410,221, filed by me of even date herewith) is supported by, and pivotally connected to, a drawn sheet metal tubular standard or base 2 the upper end of which is rectangular in cross-section. The upper edges of two sides 3 and 4 of the rectangular end of the standard are rounded concentrically with apertures 5 therein, and the other sides 6 and 7 thereof are provided with slits 8 along their edges and are rounded at their upper ends to conform, in shape, to the rounded edges of the sides 3 and 4. The sides 3 and 4 of the rectangular portion of the standard 2 are embraced by, and clamped between, the legs of two nested substantially U-shaped clips 9 and 10 that are riveted or otherwise secured to the motor 1, the legs of the clip 10 comprising comparatively narrow necks 11 provided with eyes 12 at their outer ends. The clips 9 and 10 are pivotally connected to the standard 2 by means of a bolt 13 having a wing nut 14 screw-threaded upon one end thereof, the

said bolt being surrounded, between the legs of the clip 10, by a sleeve 15. Terminal conductors 16 of the motor 1 extend downwardly into the standard 2 through openings in the bottom of the motor casing and corresponding openings in the clips 9 and 10, and also through the space between the inwardly rounded ends of the sides 6 and 7 of the standard 2.

It will be noted that, when pressure is applied to the parts of the pivotal connection by means of the wing nut 14, the sides 3 and 4 of the standard 2 are securely clamped between the clips 9 and 10, and the legs of the clip 10 are clamped between the sides 3 and 4 of the standard 2 and the ends of the sleeve 15, there being thus provided a large number of surfaces upon which pressure is exerted and between which frictional engagement exists, the result being that the motor and supporting standard may be securely clamped in any desired relative positions.

I claim as my invention:

1. The combination with a member having spaced sets of spaced projections, of another member having projections interposed between and pivotally connected to the projections upon the aforesaid member, and means for clamping together adjacent projections.

2. The combination with a member having spaced sets of spaced projections, of another member having projections interposed between the projections upon the aforesaid member, a bolt pivotally connecting the projections upon one member to those upon the other, and a sleeve surrounding the bolt between the said sets of projections.

3. The combination with a substantially rectangular tubular member having slits in opposite sides thereof, of a member carrying two nested U-shaped clips the legs of which are spaced apart and embrace the unslitted sides of the tubular member, a pin pivotally securing the clips to the tubular member, and a sleeve upon the pin between the legs of the inner clip.

4. The combination with a substantially rectangular tubular member having slits in opposite sides thereof, of a member carrying two nested U-shaped clips the legs of which are spaced apart and embrace the unslitted sides of the tubular member, a pin pivotally

securing the clips to the tubular member, a sleeve upon the pin between the legs of the inner clip, and means for adjustably applying pressure to the said parts longitudinally of the pin.

5 5. The combination with a substantially rectangular tubular member having slits in opposite sides thereof, of a member having two pairs of spaced legs that embrace, respectively, the unslitted sides of the tubular member, a bolt pivotally securing the said legs to the tubular member, and a sleeve upon the bolt between the said pairs of legs.

15 6. The combination with a substantially rectangular tubular member opposite sides of which are slitted along their edges and conform in shape to the adjacent sides, of a member carrying two nested U-shaped clips the legs of which are spaced apart and embrace the unslitted sides of the tubular member, a bolt pivotally securing the clips to the tubular member, and a sleeve upon the pin between the legs of the inner clip.

20 7. The combination with a substantially

rectangular tubular member, opposite sides 25 of which are slitted along their edges and conform in shape to the adjacent sides, of a member having two pairs of spaced legs that embrace, respectively, the unslitted sides of the tubular member, a bolt pivotally 30 securing the said legs to the tubular member, and a sleeve upon the bolt between the said pairs of legs.

8. The combination with a member having a plurality of spaced projections, of another 35 member carrying a plurality of nested U-shaped clips the legs of which are spaced apart and embrace the said projections, and means for pivotally connecting the clips to the projections and for clamping the said 40 parts together.

In testimony whereof, I have hereunto subscribed my name this 28th day of Dec., 1907.

FRED R. KUNKEL.

Witnesses:

H. M. SCHEIBE,
BIRNEY HINES.