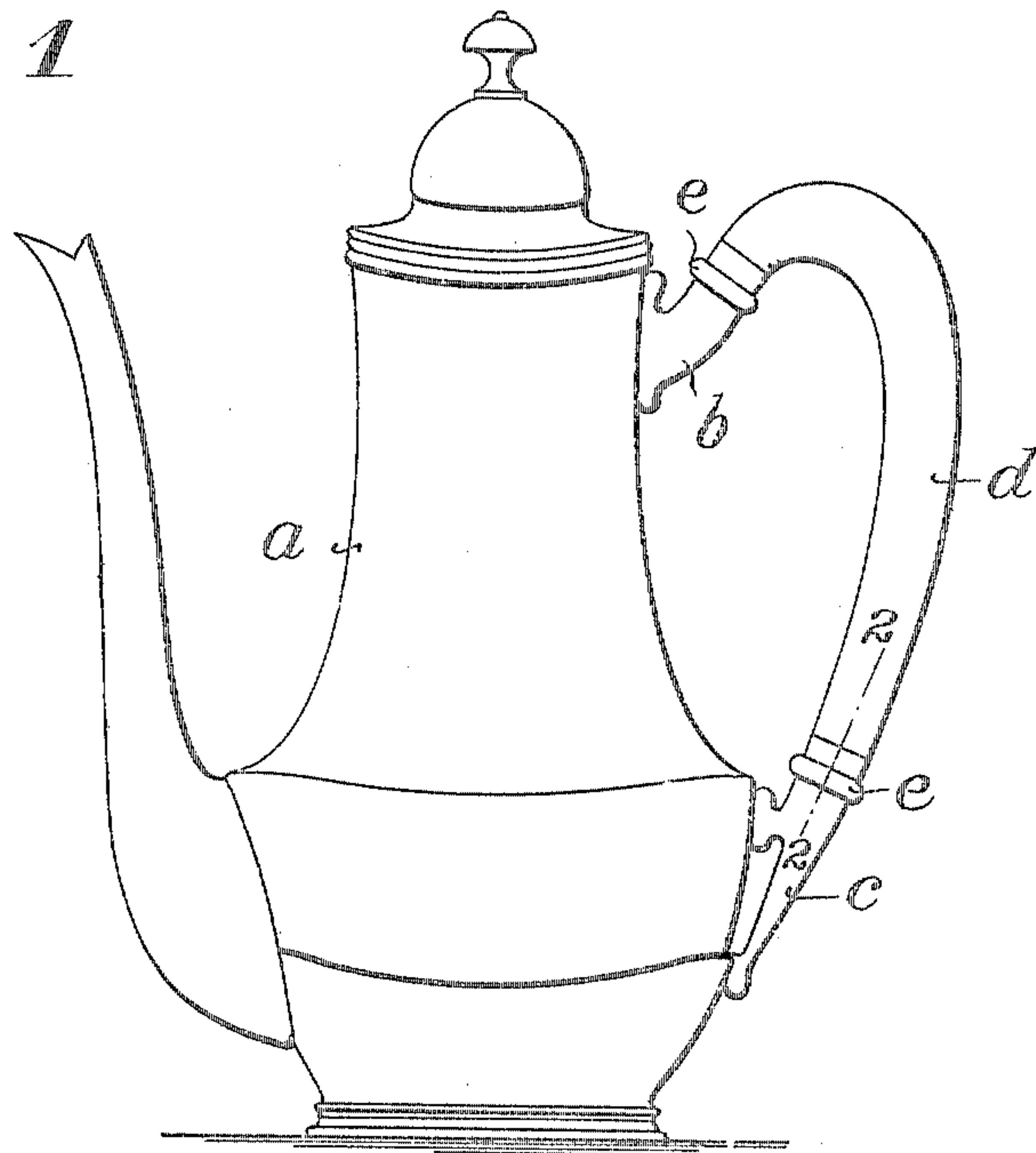


No. 793,833.

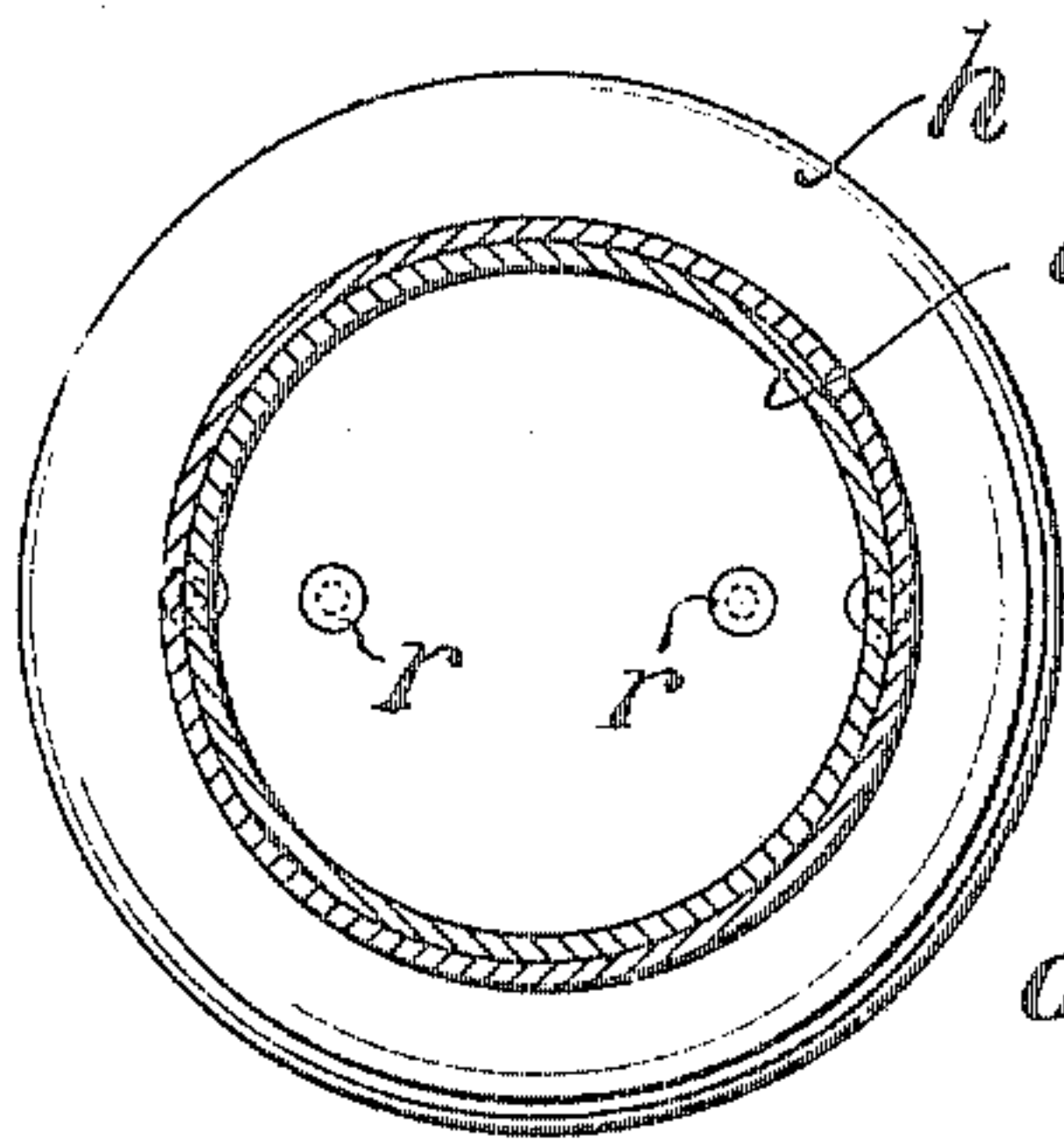
PATENTED JULY 4, 1905.

J. H. GAULT.  
INSULATING HANDLE CONNECTION.  
APPLICATION FILED JUNE 8, 1904.

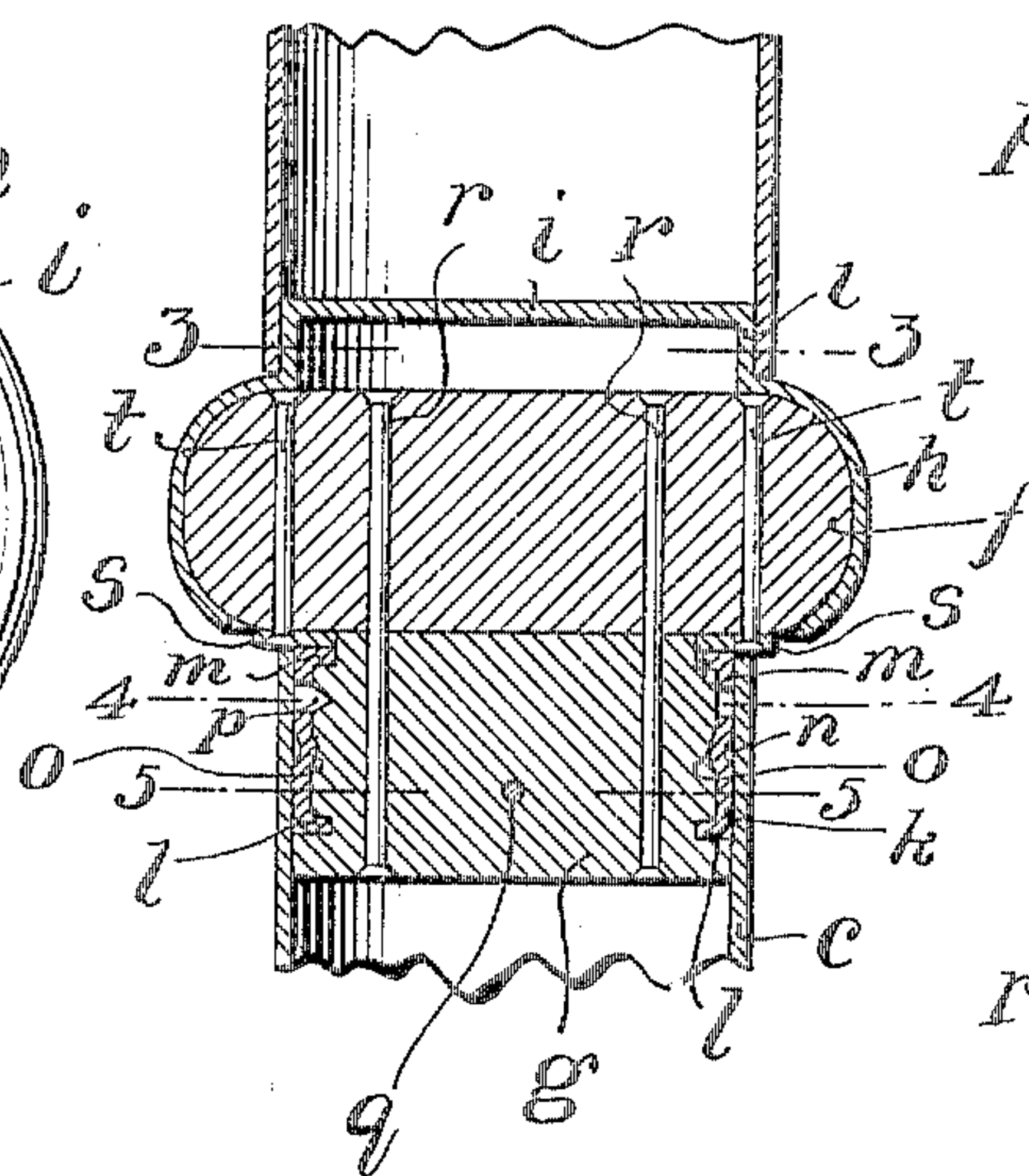
*Fig. 1*



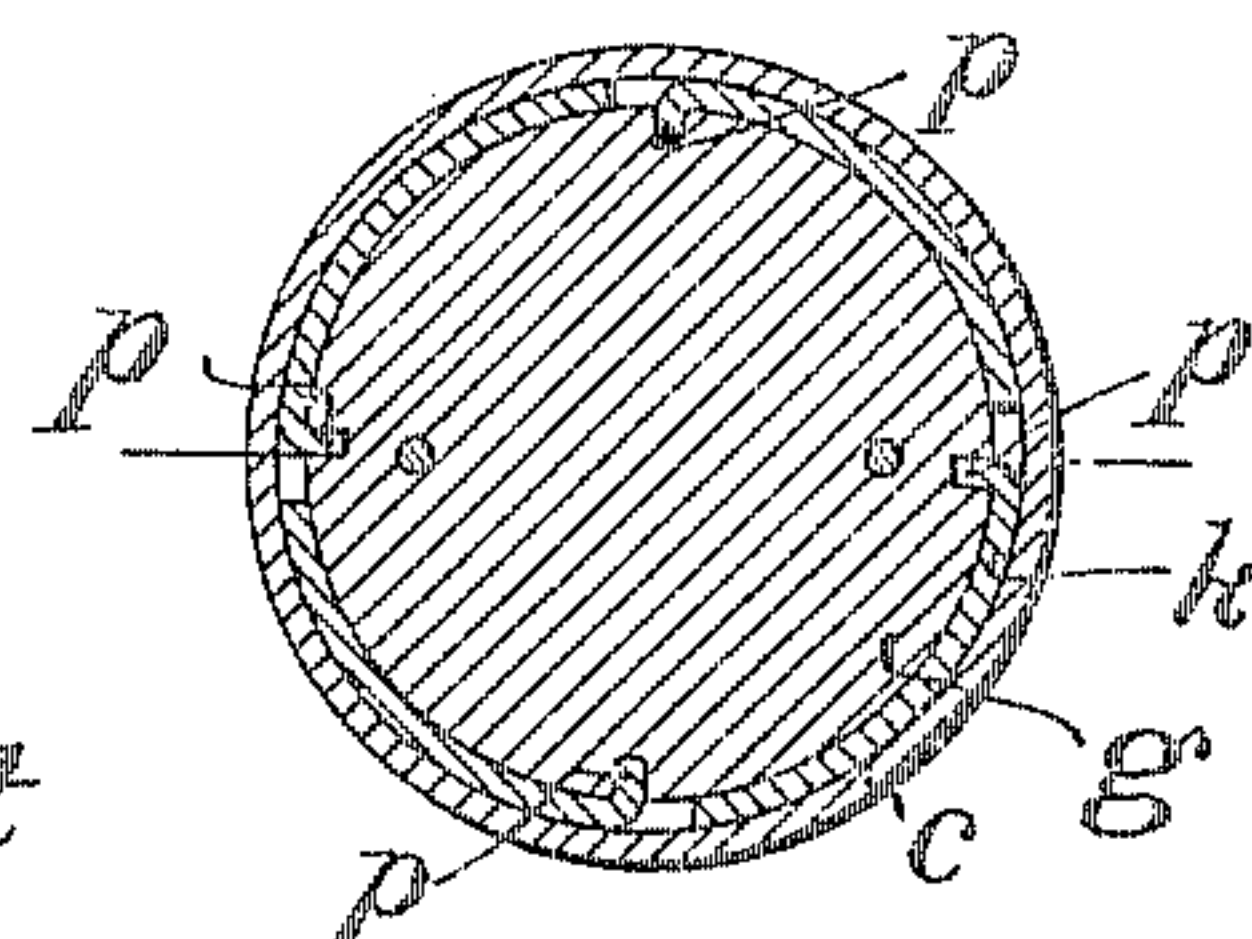
*Fig. 3*



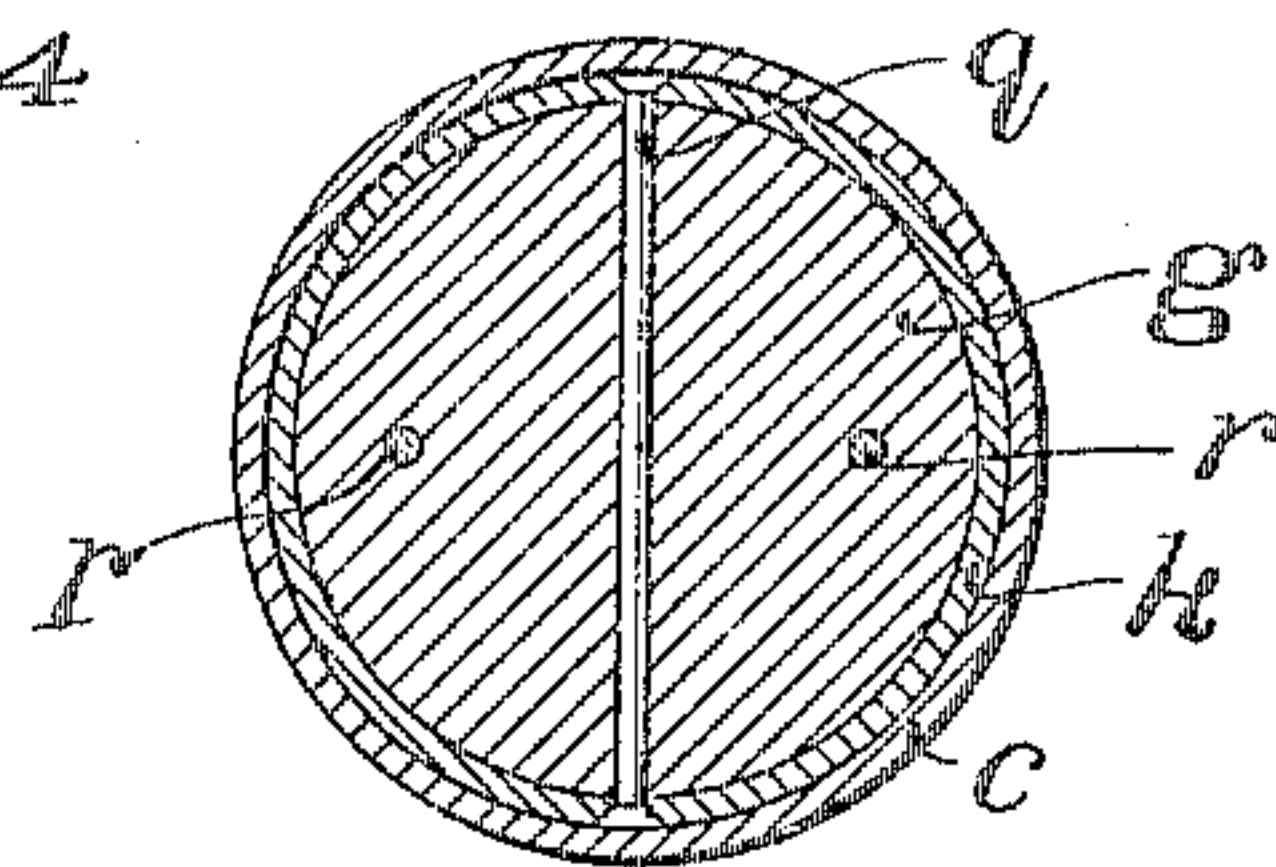
*Fig. 2*



*Fig. 4*



*Fig. 5*



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## UNITED STATES PATENT OFFICE.

JOHN H. GAULT, OF PHILADELPHIA, PENNSYLVANIA.

## INSULATING HANDLE CONNECTION.

SPECIFICATION forming part of Letters Patent No. 793,833, dated July 4, 1905.

Application filed June 8, 1904. Serial No. 211,708.

*To all whom it may concern:*

Be it known that I, JOHN H. GAULT, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Insulating Handle Connections, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an insulator for handles of vessels used to hold hot liquids adapted to be inserted in the handle between the grasping portion thereof and the body of the vessel.

The object of the invention is to secure a more certain and effective union between the insulator and the adjacent handle-section or between the sections of the handle separated by the insulator than has been heretofore possible.

In the accompanying drawings, Figure 1 is a side view of a coffee-pot with the insulator applied to the handle thereof. Fig. 2 is an enlarged sectional view on line 2 2 of Fig. 1. Fig. 3 is a section on the line 3 3 of Fig. 2. Fig. 4 is a section on the line 4 4 of Fig. 2. Fig. 5 is a section on the line 5 5 of Fig. 2.

Referring first to Fig. 1, *a* is a vessel shown here as a coffee-pot. *b* and *c* are end sections of the handle, projecting, respectively, from the upper and lower portions of the body of the vessel. *d* is the grasping portion of the handle connecting the end sections *b* and *c* and forming with the latter the handle as a whole. The insulating devices *e e* are inserted, respectively, between sections *b* and *d* and between sections *c* and *d*. These two insulating devices are the same in construction, and the description of one will serve as a description for the other.

Referring now to Figs. 2, 3, 4, and 5, *f* and *g* are the core members of insulating material. They may be made integral, although it will be more convenient from a manufacturing standpoint to make them separate, as shown. The portion *f* of the core has a convex periphery and extends outwardly beyond the portion *g*. The grasping portion *d* of the handle is secured to the core in the manner

shown in the patent granted to me November 24, 1903, No. 744,743—that is, a metal shell having a convex body *h*—and a cylindrical neck or head *i* is secured to the core by bending or spinning the body *h* around the core member *f*, while the head *i* projects above the core. The body of the shell is somewhat shorter than the core member *f*, so as to leave a definite space between the lower end of the shell-body and the core member *g*. The head *i* extends and closely fits within the hollow lower end of the grasping portion *d* of the handle and is brazed, soldered, or otherwise secured thereto. *k* is a metal ring embracing the core member *g* and firmly secured thereto by the following means: The lower end of the ring is upset to form an annular internal flange *l*, which penetrates the core member. The upper end of the ring is upset similarly to the lower end, forming an annular internal flange *m*, which penetrates or overlies the core member. Between its upper and lower ends a groove *n* is formed around the ring, which displaces the metal of the ring inwardly, forming an annular internal bead *o*, which somewhat displaces the material of the core member and prevents any movement longitudinally of the ring thereon. Also between the upper and lower ends of the ring ears *p* are formed on the ring by displacing inwardly the metal thereof and the ears inserted into the core member, as may be best seen in Fig. 4. A rivet *q* extends from one side of the ring to the other, extending through the core member, the heads of the rivets resting in countersinks in the ring. By the foregoing means the ring *k* and the core member *g* are firmly secured together. Of course it will be understood that all of the described means of union need not be employed, the employment of any one or more of them being within the scope of my invention, which, in fact, may exist independently of the particular securing means employed. The ring *k* extends and closely fits within the hollow end of the lower handle-section *c* and is brazed, soldered, or otherwise secured thereto. If the core members *f g* are made integral, the structure as far as described may be considered a complete structure so far as concerns its opera-



tiveness; but if the core members are made separate it is necessary to provide some means for uniting them. Moreover, whether the core members are separate or integral it is advisable to provide means for rigidifying them. The rivets *r r*, which extend through both core members and whose heads rest in countersinks in the upper surface of core member *f* and the lower surface of core member *g*, perform this rigidifying function whether the core members be separate or integral and also where the core members are originally separate serve to unite the core members together into a unitary core. It is also advisable for further security to unite the ring *k* to the core member *f*. This is accomplished by the following means: An annular disk or flange *s* is secured by brazing, soldering, or other means to the top of ring *k*, or it may be made integral with the ring *k* by lengthening the latter and at its upper portion bending the ring inwardly to form the flange *m*, as before described, and thence outwardly to form the flange *s*. The flange *s* extends outwardly beyond the ring and beyond the end of the handle-section *c*. *t t* are rivets extending through the flange *s* and core member *f*, thereby binding the core member *f* to the ring *k* and affording, in fact, an additional or alternative means of securing together the core members *f* and *g* and of rigidifying the core by reason of the attachment of the ring *k* to the core member *g*. It will be observed that there is a space between the rim of flange *s* and the lower end of the body *h* of the shell *h i*. This discontinuity in the metal prevents the conduct of any heat from the body of the vessel to the grasping portion of the handle. The substantial length of contact between the handle-section *c* and the ring *k* enables a very firm union to be effected between the same.

Having now fully described my invention, what I claim, and desire to protect by Letters Patent, is—

1. An insulating handle connection, comprising hollow handle-sections, a core of insulating material, means whereby one portion of the core may be secured to one section of the handle, a ring embracing the other portion of the core and extending within and secured to the other section of the handle, means securing said ring to the last-named portion of the core, and independent means engaging both portions of the core for rigidifying the same.

2. An insulating handle connection, comprising hollow handle-sections, a core of insulating material, means whereby one portion of the core may be secured to one section of the handle, a ring embracing the other portion of the core and extending within and secured to the other section of the handle, means securing said ring to the last-named portion of the core, and a rivet extending longitudi-

nally through both portions of the core for rigidifying the same.

3. An insulating handle connection comprising hollow handle-sections, a shell having a neck extending within one of said hollow handle-sections and a convex body portion of greater diameter than the neck extending beyond said hollow handle-section, a core formed of a part of greater diameter having a convex surface inclosed by the shell and a part of lesser diameter extending within the other hollow handle-section and means interposed between and secured to both the last-named part of the core and the last-named hollow handle-section for holding the last-named part of the core in position.

4. An insulating handle connection comprising hollow handle-sections, a core of insulating material having two portions, means whereby one portion of the core may be secured to one section of the handle, and a ring embracing and secured to the other portion of the core, the other section of the handle surrounding both the ring and last-named portion of the core and secured to the ring.

5. An insulating handle connection comprising hollow handle-sections, a core of insulating material having two portions, means whereby one portion of the core may be secured to one section of the handle, a ring extending within and secured to the other section of the handle, and means to secure said ring to both portions of the core.

6. An insulating handle connection comprising hollow handle-sections, a core of insulating material having two portions, means whereby one portion of the core may be secured to one section of the handle, a ring embracing the other portion of the core and extending within and secured to the other section of the handle, means to secure said ring to the core, and means engaging both portions of the core for rigidifying the same.

7. An insulating handle connection comprising hollow handle-sections, a core of insulating material having two portions, means whereby one portion of the core may be secured to one section of the handle, a ring secured to the other portion of the core and adapted to extend within and be secured to the other section of the handle, means to secure said ring to both portions of the core, and means engaging both portions for rigidifying the same.

8. An insulating handle connection comprising hollow handle-sections, a core of insulating material, a ring embracing one portion of the core and extending within and secured to one section of the handle, means securing said ring to the section of the core that it embraces, and a rivet extending through the ring and core for securing them together.

9. An insulating handle connection comprising a core of insulating material, a ring embracing one portion thereof and adapted to



be secured to a section of the handle, and an inwardly-extending flange on the end thereof embedded in the body of the core.

10. An insulating handle connection comprising a core of insulating material, a ring embracing and secured to one portion thereof and adapted to be secured to a section of the handle, and ears displaced from the metal of the ring and extending inwardly into said core.

11. An insulating handle connection comprising hollow handle-sections, a core of insulating material having two portions, means whereby one portion of the core may be secured to one section of the handle, a ring embracing the other portion of the core and extending within and secured to the other section of the handle, means securing said ring to the last-named portion of the core, and a rivet extending through the ring and the portion of the core embraced thereby.

12. An insulating handle connection comprising a core of insulating material having two portions, means whereby one portion of the core may be secured to one section of the handle, a ring embracing the other portion of the core and adapted to be secured to the other section of the handle, and an inwardly-extending flange on the end of said ring embedded in the body of the last-named portion of the core.

13. An insulating handle connection comprising a core of insulating material having two portions, means whereby one portion of the core may be secured to one section of the handle, a ring embracing the other portion of the core and adapted to be secured to the other section of the handle, and ears displaced from the metal of the ring and extending inwardly into the last-named portion of the core.

14. An insulating handle connection comprising a core of insulating material having

two portions, means whereby one portion of the core may be secured to one section of the handle, a ring embracing the other portion of the core and adapted to be secured to the other section of the handle, and a flange extending outwardly from said ring against which the end of the last-named handle-section is adapted to abut.

15. An insulating handle connection comprising a core of insulating material having two portions, means whereby one portion of the core may be secured to one section of the handle, a ring embracing the other portion of the core and adapted to be secured to the other section of the handle, a flange extending outwardly from the end of the ring adjoining the first-named portion of the core, and a rivet securing said flange to said first-named portion of the core.

16. An insulating handle connection comprising a core of insulating material having two portions of different diameters, the portion of greater diameter having a convex surface, a shell having a convex body portion embracing the convex portion of the core and a neck extending longitudinally beyond its convex body portion, combined with hollow handle-sections, into one of which the neck of the shell extends and into the other of which the narrower portion of the core is inserted, and a ring interposed between the last-named portion of the core and the surrounding handle-section and secured to each, substantially as described.

In testimony of which invention I have hereunto set my hand, at Philadelphia, on this 3d day of June, 1904.

JOHN H. GAULT.

Witnesses:

M. M. HAMILTON,  
WILLIAM B. MARKS.