No. 671,758. Patented Apr. 9, 1901.

T. H. COSTELLO.

BASE FOR CHAIRS OR STOOLS.

(Application filed Apr. 14, 1900.)

(No Model.) 2 Sheets—Sheet 1.

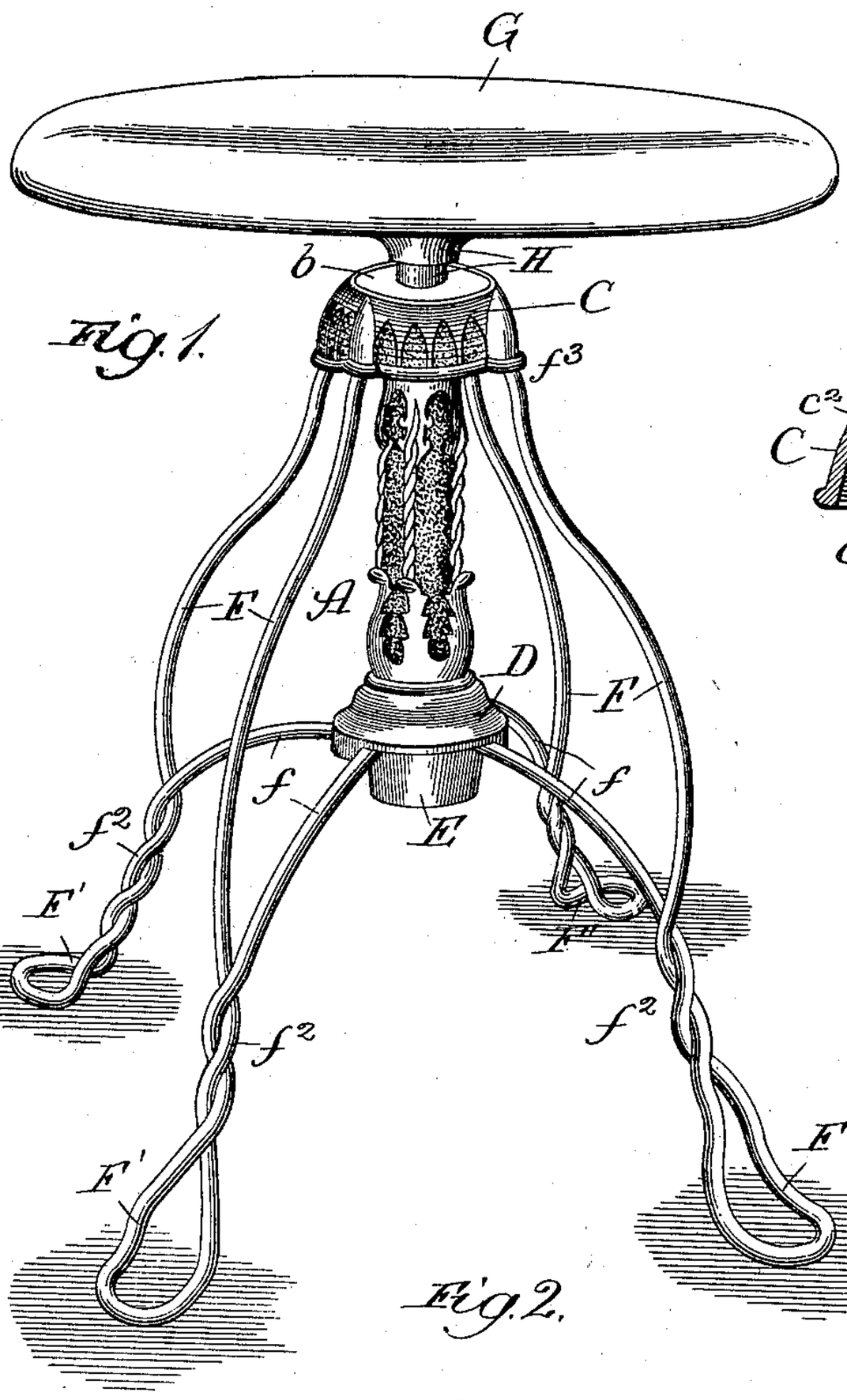

Fig. 1.

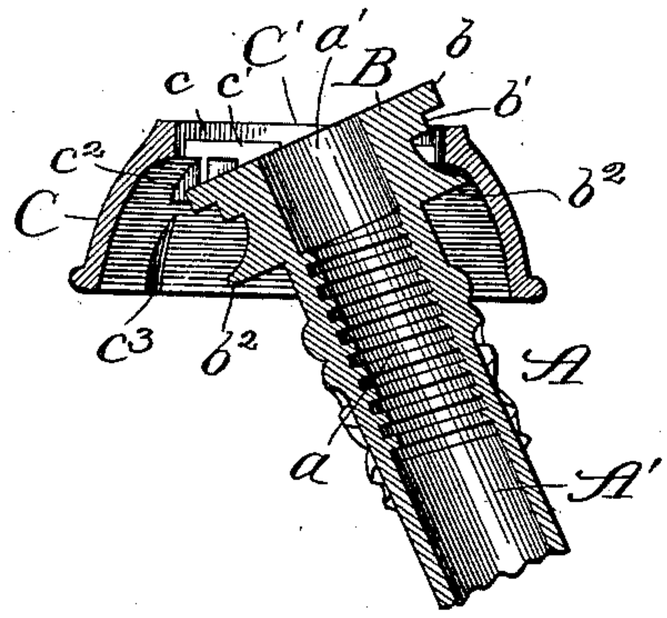

Fig. 4.

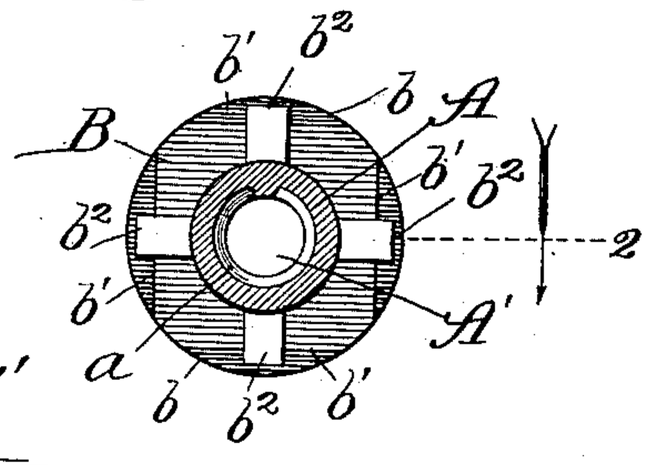

Fig. 5.

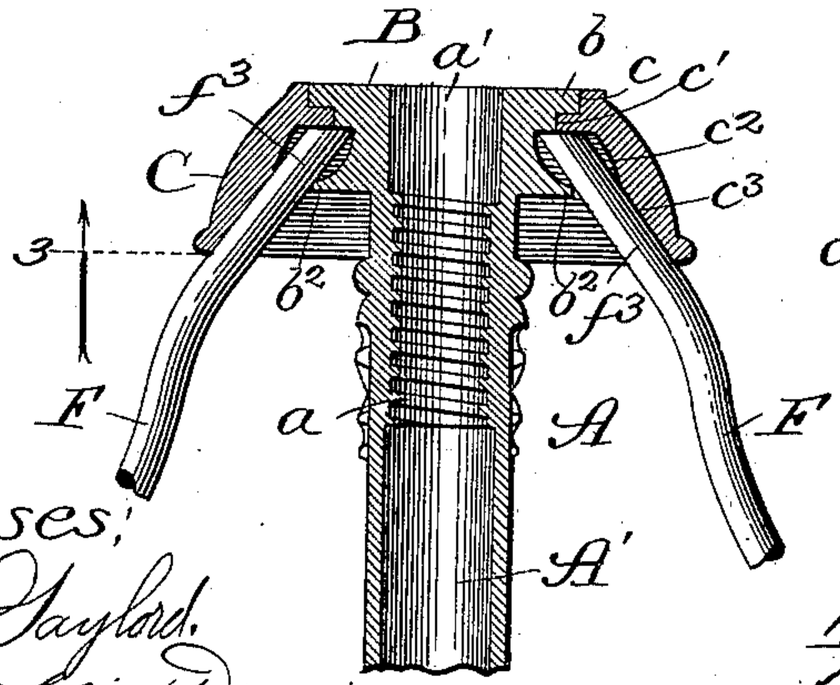

Fig. 2.

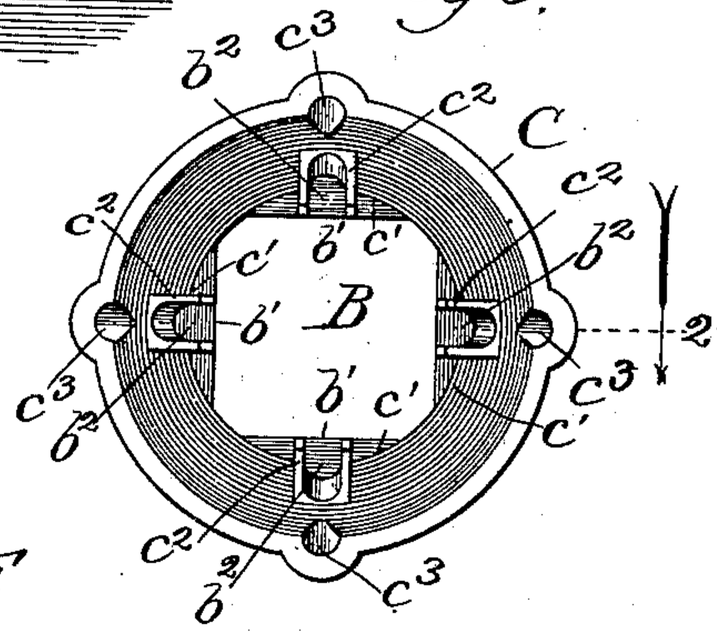

Fig. 3.

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Fig. 7.

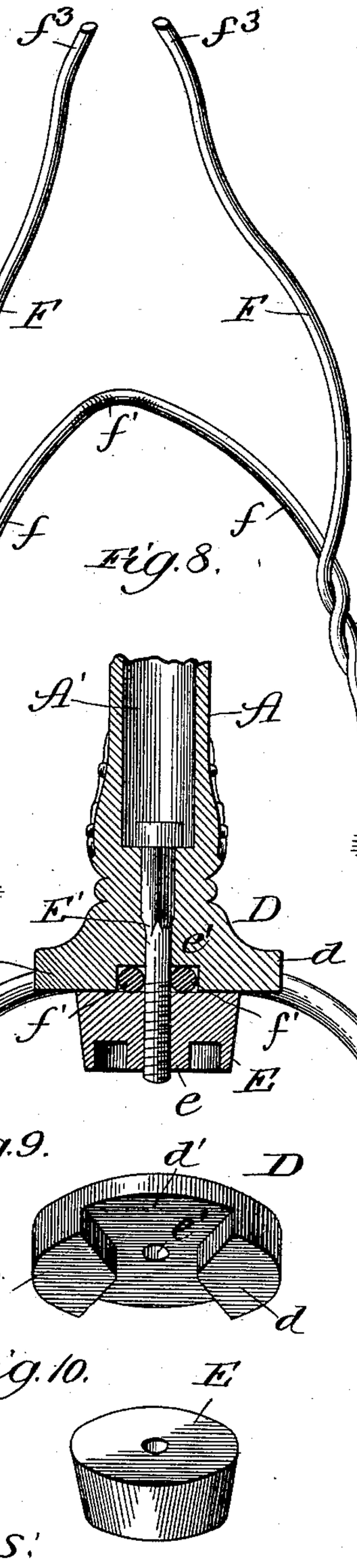


Fig. 8.

Fig. 9.

Fig. 10.

Fig. 6

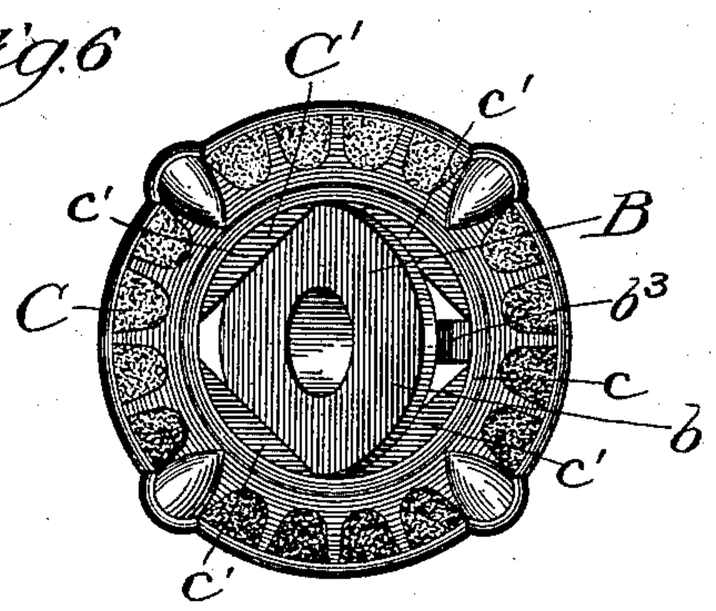


Fig. 12.

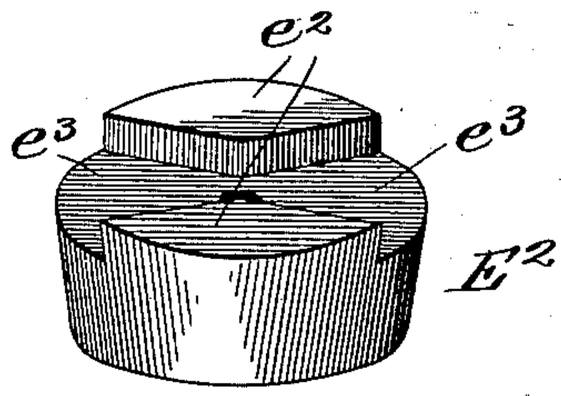
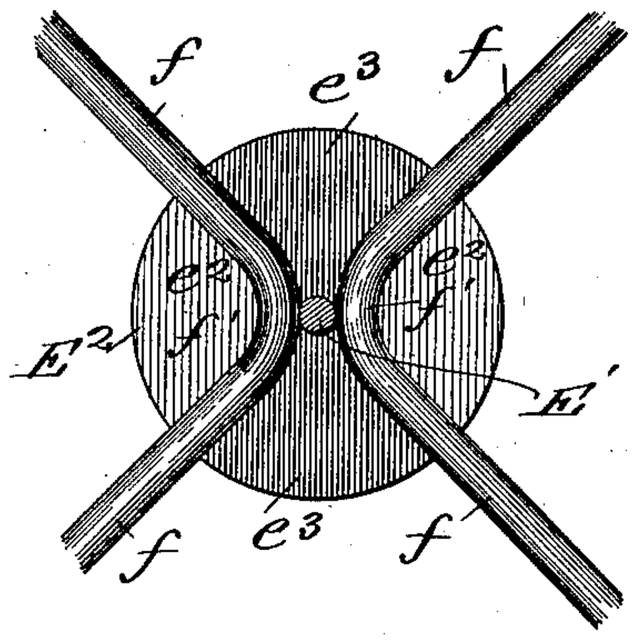


Fig. 11.



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UNITED STATES PATENT OFFICE.

THOMAS H. COSTELLO, OF CHICAGO, ILLINOIS.

BASE FOR CHAIRS OR STOOLS.

SPECIFICATION forming part of Letters Patent No. 671,758, dated April 9, 1901.

Application filed April 14, 1900. Serial No. 12,796. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. COSTELLO, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Bases for Chairs or Stools, of which the following is a specification.

The object of this invention is to construct a metal base or stand on which to mount and support a chair or stool seat and have the construction of such base or stand one in which the component parts thereof are separable one from the other for the ready assembling of the parts to form the base or stand and when assembled have the parts support each other and furnish a strong, firm, and rigid base or stand which will receive the end pressure of the seat in use directly on the legs in a uniform and efficient manner; and the invention consists in the features of construction and combination of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view in elevation, showing the invention in its application to a stool; Fig. 2, a sectional elevation of the upper end of the pedestal with the locking-cap and ends of the legs in position for locking the parts together; Fig. 3, a cross-section, taken on line 3 of Fig. 2, looking in the direction of the arrow; Fig. 4, a cross-section, taken on line 3 of Fig. 2, showing only the pedestal and upper head; Fig. 5, a sectional view of the upper end of the pedestal and the locking-cap, showing the manner of passing the head of the pedestal through the cap; Fig. 6, a plan view of the parts shown in Fig. 5 with the parts in similar position; Fig. 7, an elevation showing the construction of the legs; Fig. 8, a sectional elevation of the lower end of the pedestal and its head, showing the arrangement for uniting the legs to the pedestal; Fig. 9, a perspective view looking at the under side of the lower head of the pedestal; Fig. 10, a perspective view looking at the upper side of the clamping-nut; Fig. 11, a plan view showing a modified construction of the clamping head or nut for the legs, and Fig. 12 a perspective view looking at the upper side of the clamping head or nut of Fig. 11.

The base or stand is constructed from metal as a whole, employing in the construction thereof a pedestal A, made of cast or malleable iron or other suitable material of the construction hereinafter described, which pedestal is used in connection with legs made of metallic rods, as hereinafter described. The pedestal is preferably hollow, with a longitudinal opening or hole A′, and at the upper end of the opening or hole is a screw-thread *a* for the reception of the screw-threaded stem on which the seat is mounted. The upper end of the pedestal has a head B, through which, in alinement with the hole A′, is a hole *a′* for entering the screw-threaded stem of the seat in place. The head B has an outer annular disk or plate *b*, which is undercut on four sides to have two undercuts opposite each other, and each undercut has a squared shoulder or wall *b′*. Beneath the undercuts, on the lower portion of the head and in central alinement with each undercut, is a lug b^2, four lugs being provided, two in line on opposite sides of the head or pedestal.

The head B is encircled by a cap C, of a saucer or disk shape. This cap has an opening C′ in its top, which opening is for the passage of the annular disk or plate *b* of the pedestal-head. This opening has a peripheral rim *c*, inwardly projecting, from which are four ledges *c′*, each ledge having a squared inner edge to fit the squared shoulder or wall *b′* when the head is in place, with the disk or plate resting in the annular rim *c* and supported at the undercut portions on the ledges *c′*. The inner face of the cap C, in line with the lugs b^2 and central of each ledge *c*, is provided with a lug c^2, each lug having in its inner face a semicircular recess, and at the bottom of the cap, in line with each recessed lug c^2, is a recess c^3, of a semicylindrical shape in cross-section. The lugs b^2 and c^2 and the recesses c^3 will be in line one with the other when the cap is connected with the pedestal.

The pedestal and cap are connected together by turning the pedestal at an incline, as shown in Fig. 5, and then passing the head B up through the opening C′ in the manner shown in Fig. 5 until the head is entirely through the opening, when the pedestal can be straightened and the head B will have the cap C thereon, with the outer disk or plate of the

head within the rim of the cap, as shown in Fig. 2, and the two parts will be locked together by the insertion of the legs, as hereinafter described.

The lower end of the pedestal has a head D, the under face of which is cut away, so as to form lugs d with an opening d' between the lugs, as shown in Fig. 9. The lugs d are of a triangular or flaring shape, having an apex or inner end and a base or outer end, and the projection of the lugs is one to give a depth or thickness corresponding to the diameter or thickness of the rod from which the legs are formed. The head has a central longitudinal opening e' for the passage of a bolt, which bolt is entered through the opening a' and passes down through the opening A' for its end to project through the head, and the projecting end of the bolt is screw-threaded to receive a clamping head or nut E, which, as shown in Fig. 8, has a central boss e, of rectangular or other shape, suitable to receive a wrench, by means of which the nut can be screwed down or removed from the bolt.

The legs F are made from a rod of the requisite length for a single rod to be bent and turned to form two legs F, each with a foot F'. The rod is twisted on itself at each side, as shown at f^2, and is continued up in the form of an arch f, which is turned at the center to form an open eye or loop f', which fits over the lug d. For this purpose the turned center f, when the legs are in place, stands in a horizontal plane. Each rod, bent as described, forms two legs, each having a foot with a twist in the rod above the foot and each leg terminating in a free end f^3, which ends are suitably inclined, so that they can be entered into the recesses c^3 and pass up between the cap C and head B in alinement with the lugs b^2 and c^2, with the extreme upper end in the half-socket of the lugs c^2 and with the end abutting against the under face of the top portion of the cap and the under face of the head at the line of undercut and ledge, as shown in Fig. 2, thus giving a full end bearing for each leg beneath the upper portion of the pedestal-head and the cap, half of such end bearing being underneath the cap at the ledge c' and the other half underneath the head. This insertion of the free end of the legs into the recesses and against the lugs, as described, locks the cap and head together and holds the two firmly against any displacement of either until the legs are withdrawn, and when the pedestal-head and cap are thus locked together the pedestal has a central support and bearing on the legs, by which the pressure in the use of the seat will be in a direct line and on the legs, leaving the pedestal free from strains.

The parts are assembled by passing the pedestal-head B through the opening of the cap C and setting the head in place, so as to have the undercuts with the square shoulders rest on the ledges with the square edges. The legs are then inserted by passing the free ends up into the recesses c^3, between the pedestal-head and the cap and in engagement with the lugs of the head and the cap, locking the head to the cap and holding the pedestal in a suspended position. The arch portion f of the legs is then brought into position for the bend or loop f' to pass back of the lug d, a pair of legs being thus attached to each lug. The bolt E' is then dropped through the pedestal with its screw-threaded end passing through the opening e', and the assembling is completed by screwing down the clamping head or nut E, as shown in Fig. 8, bringing the base or stand into the position shown in Fig. 1. The base or stand thus assembled is ready for the reception of the seat G, which seat, as shown, is mounted on a stem H, having an exterior screw-thread to coact with the screw-thread a, so that by turning the seat it can be raised or lowered on the base or stand, as required for adjustment for use.

A modified form of clamping-head is shown in Figs. 11 and 12, in which the upper face has lugs e^2, with recesses e^3 between the lugs. The construction is one corresponding to the construction of the under face of the head D, except that the position of the lugs and recesses is reversed in the two, so that a lug e^2 will enter a recess d' and close the opening between the arches of the legs, which opening would appear with the construction of clamping head or nut of Figs. 8 and 10. The clamping-head of Fig. 12 is to have a central opening for the passage of the stem of the bolt E', and the stem of the bolt is to have an ordinary nut, by means of which the head can be drawn to place, so as to clamp and hold the arch portions of the legs between the two heads, as shown in Fig. 8.

The construction of the stand or base as a whole is very simple, and, being made entirely of metal, when the parts are together a strong and rigid support is furnished on which to mount a seat. The parts can be readily and quickly assembled, and when together the pedestal is suspended from the cap and at the same time is supported from the arch of the legs on opposite sides, thus giving a direct line of support by means of which the pressure in use will be a direct end thrust on the legs, and the stand will be found exceedingly light and at the same time capable of standing ordinary usage without liability of breaking down.

I claim—

1. In a base or stand for seats, the combination of a central pedestal, a head on the upper end of the pedestal having an end annular disk with square shouldered or walled undercuts on its sides and having in line with each undercut a lug, and a cap having a central opening with an annular top rim provided with inwardly-projecting ledges to engage the undercuts of the head and having on its inner face a recessed lug in line with each ledge and coinciding with a lug of the head and having recesses at its inner lower

edge in line with the recessed lugs, for entering the upper ends of the base or stand-legs in the recesses and in engagement with the lugs and thereby interlocking the pedestal-head and the cap, substantially as described.

2. In a base or stand for seats, the combination of a central pedestal, a head on the upper end of the pedestal having an end annular disk with square shouldered or walled undercuts on four sides and having in line with each undercut a lug, a head on the lower end of the pedestal having on two opposite sides of its under face a lug, a top cap having a central opening for the passage of the upper head of the pedestal and provided with an annular top rim having inwardly-projecting ledges to coincide with and engage the undercuts of the head and having on its inner face a recessed lug in line with each ledge and coinciding with a lug of the head and having recesses in its lower edge in line with the recessed lugs, and a clamp head or nut coacting with the lower head of the pedestal for uniting and securing the legs of the base or stand to the pedestal by entering the upper ends of the legs in the recesses of the cap and between the lugs of the upper head and the cap and engaging the legs with the lower head of the pedestal around the lugs and there clamping them by the head or nut, substantially as described.

3. In a base or stand for seats, the combination of a central pedestal, a head on the upper end of the pedestal having an end annular disk with square shouldered or walled undercuts on four sides and having in line with each undercut a lug, a head on the lower end of the pedestal having on two opposite sides of its under face a lug, a cap having in its top a central opening for the passage of the annular disk of the head and provided with an annular top rim having inwardly-projecting ledges to engage the undercuts of the head and having in line with each ledge on its inner face a recessed lug coinciding with a lug of the head and having in its inner lower edge recesses in line with the recessed lugs, a locking or clamping nut or head coöperating with the under face of the lower pedestal-head, and a pair of lugs, each pair having a connecting-arch with a central bend or curve for engagement with the lugs of the lower head and each leg of a pair having its upper end to enter the recesses of the cap and pass between the lugs of the pedestal upper head and cap to engage the inner faces of the outer disk of the head and the cap, for interlocking the head and cap and rigidly securing the legs and pedestal together, substantially as described.

4. In a base or stand for seats, the combination of a central pedestal, a head on the upper end of the pedestal having an end annular disk with square shouldered or walled undercuts on four sides and having in line with each undercut a lug, a head on the lower end of the pedestal having on two opposite sides of its under face a lug, a cap having in its top a central opening for the passage of the annular rim of the head and provided with an annular top rim having inwardly-projecting ledges to engage the undercuts of the head and having in line with each ledge on its inner face a recessed lug coinciding with a lug of the head and having in its inner lower edge recesses in line with the recessed lugs, a locking or clamping nut or head coöperating with the under face of the lower pedestal-head, a bolt passing through the lower pedestal-head and receiving the clamping or locking nut or head, and a pair of legs, each pair having a connecting-arch with a central bend or curve for engagement with the lugs of the lower head and each leg of a pair having its upper end to enter the recesses of the cap and pass down the lugs of the pedestal upper head and cap to engage the inner faces of the outer rim of the head and the cap, for interlocking the head and cap and rigidly securing the legs and pedestal together, substantially as described.

5. In a base or stand for seats, the combination of a central pedestal, a head on the upper end of the pedestal, a cap inclosing the head, a head on the lower end of the pedestal having downwardly-projecting lugs presenting inner engaging faces, a pair of legs made from a single rod turned and twisted on itself to form two legs from one rod integrally united one to the other by a central arch upwardly and inwardly curved, the arch having its upper end in a horizontal plane with a continuous bend adapted to be received and interlocked with the engaging faces of the downwardly-projecting lugs, each leg having its upper portion extended above the arch and deflected inward to be received and interlocked between the head on the upper end of the pedestal and the cap, and a clamping bolt and nut retaining the arch and lugs in engagement, substantially as described.

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