

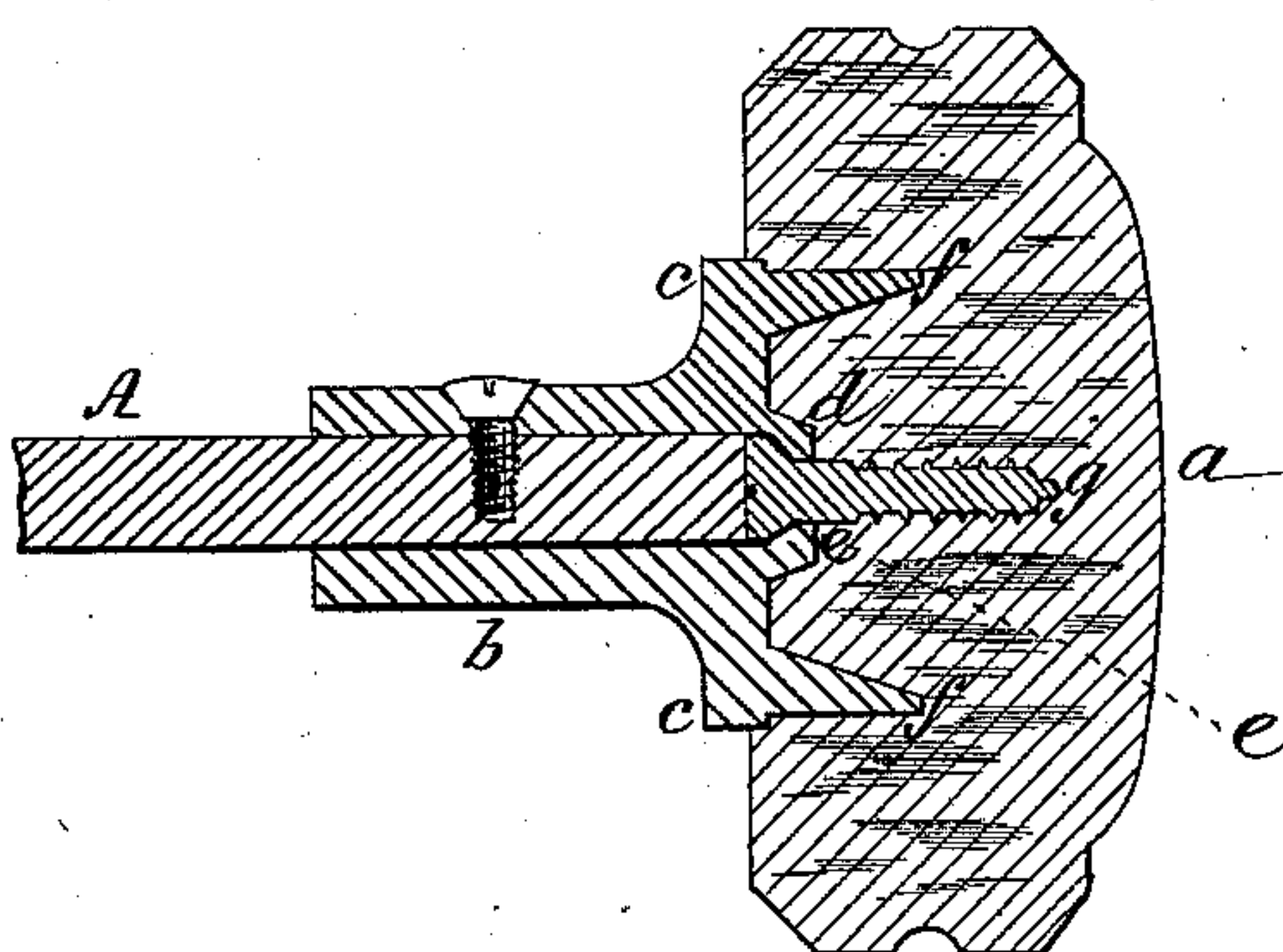
(No Model.)

J. BARDSLEY.

DOOR KNOB.

No. 253,831.

Patented Feb. 21, 1882.



Witnesses:

Philip F. Garner

Elmond Broshag

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UNITED STATES PATENT OFFICE.

JOSEPH BARDSLEY, OF NEWARK, NEW JERSEY.

DOOR-KNOB.

SPECIFICATION forming part of Letters Patent No. 253,831, dated February 21, 1882.

Application filed September 27, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH BARDSLEY, a citizen of the United States, residing at Newark city, county of Essex, and State of New Jersey, have invented new and useful Improvements in Knob Attachments, of which the following is a specification.

I have improved the knob attachment in which a socket for the lock-spindle is used with a wooden knob; and the object of my improvement is to prevent the splitting of the knob in securing the spindle-socket thereto by a central screw, so that in using a simple and effective means for securing a wooden knob to a metallic spindle-socket I also render it impossible to make such attachment without loss by the splitting of the knob. As such knobs are capable of ornamentation, can be made of any wood and of different forms, and are cheap, it is important that the means of attachment should be cheap and durable.

The specific matter of my improvement consists of a socket for the lock-spindle formed with a collar having wedge-pins and an interior central shoulder, in combination with a wooden knob, a central fastening-screw, and the spindle of a lock or latch, the socket of the stem being of square cross-section, so that the spindle, its socket-stem, and knob cannot turn one upon the other.

The drawing represents in section a wooden knob and the metallic socket for the spindle of a lock or latch embracing my improvement.

The knob *a* may be of any suitable kind of wood and of any design and finish, and, indeed, it may be of any material into which a wood-screw will cut its way.

The metallic socket *b* is formed with a collar, *c*, and is adapted to receive the spindle *A* of the lock in the usual manner. A central projection, *d*, is formed upon the inner side of the collar of the socket, and has a hole, *e*, in line with the axis of the spindle. The knob is recessed on its back to receive this collar-projection, and it may be recessed to receive or partially receive the collar. Wedge-shaped pins *f f* are formed with and project from the inner side of the collar at or near its edge, and are driven into corresponding holes formed in the back of the knob, and thus prevent the knob from being turned upon the socket. A

wood-screw, *g*, inserted through the socket, is driven into the knob through the hole in the collar-projection, and thus securely fastens the locked collar-socket to the wooden knob. 55

As the locking of the socket-collar to the knob can be effected by making the collar of square form, such locking function is not the primary object of the wedge-pins. As shown, the wedge sides of these pins are toward the fastening-screw, and as they are driven into the knob they will crowd the grain of the wood to the center of the knob and compact it upon the collar-projection, so that in the subsequent operation of driving home the screw the tendency of the knob to split will be prevented, and the collar will be more firmly bound to the knob than would be possible without the wedge function of the pins. Indeed, without such capacity of the pins the loss of the knobs by the splitting tendency of the screw would render such fastening unprofitable in the use of wooden knobs. 60 65 70

The compacting of the grain in the central part of the knob by the operation of driving in the wedge-pins of the socket-collar prevents the starting of a split in the line of the screw, notwithstanding a hole is bored for its entrance. The wedge-pins are placed on opposite sides of the center of the socket, and occupy a position across the grain of the wood. 75 80

Although I find the central collar-projection important in giving greater firmness and durability to the connection of the knob and socket, yet it is not essential to the proper function of the wedge-pins, and the seat for the screw-head may be formed in the same plane with the collar; but its projection gives greater depth to the spindle-socket without increasing the length of the neck thereof. 85 90

In using the wedge-pins with the central fastening-screw the action of driving home the screw draws the wedge-pins firmly into the knob, and in such action the tendency of the screw to split the knob is counteracted by the drawing in of the wedge-pins, the head of the screw drawing directly upon an interior shoulder of the stem-collar. 95

A caster-cap inclosing the chair-leg has been formed with a tubular stem for the caster-yoke to revolve on, and wedge-prongs entering the leg of a chair to prevent the cap from turning 100

thereon, in connection with a central screw for securing said cap to the leg; but in such construction the cap forms a socket for the chair-leg, a bearing for the caster-yoke, and a socket
5 for a fastening-screw having its head outside of said socket-stem, and therefore could not be used with the square spindle of a lock fitting the square socket of the collar.

A metal collar, of wedge shape in cross-section, has been driven into a knob like a ferrule-wedge, so as to inclose and crowd the fiber of the knob upon the serrated end of the spindle to firmly wedge it in the knob and permanently
10 fasten the knob upon the spindle; but such construction cannot be used with a socket-stem,
15 an interior fastening-screw, and a lock-spindle fastened to the knob-socket stem by a screw.

I claim—

The attachment for wooden knobs herein described, consisting of a spindle-socket formed
20 with a collar having wedge-pins and an interior central shoulder, in combination with a wooden knob, a central fastening-screw, and a lock-spindle, substantially as described.

In testimony whereof I have hereunto set my
25 hand in the presence of two subscribing witnesses.

JOSEPH BARDSLEY.

Witnesses:

JOHN HOLMES,
JOSEPH MCKAY.