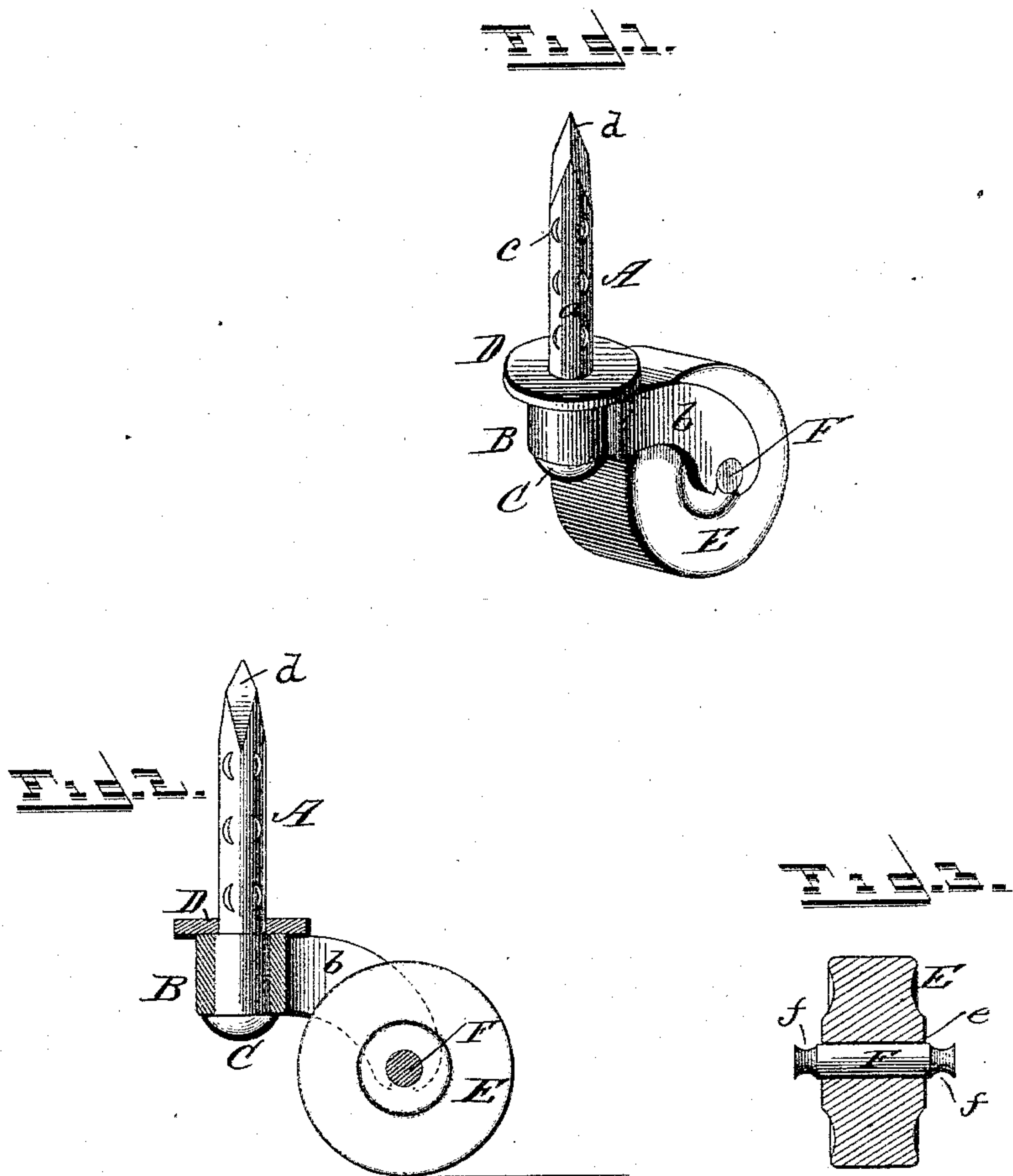


(No Model.)

A. M. SWAN.
FURNITURE CASTER.

No. 414,603.

Patented Nov. 5, 1889.



Witnesses
L. S. Elliott.
E. A. Bond.

Inventor
Alfred M. Swan.
By his Attorney
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UNITED STATES PATENT OFFICE.

ALFRED M. SWAN, OF JOLIET, ILLINOIS.

FURNITURE-CASTER.

SPECIFICATION forming part of Letters Patent No. 414,603, dated November 5, 1889.

Application filed March 15, 1889. Serial No. 303,429. (No model.)

To all whom it may concern:

Be it known that I, ALFRED M. SWAN, a citizen of the United States, residing at Joliet, in the county of Will and State of Illinois, have
5 invented certain new and useful Improvements in Furniture-Casters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being
10 had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

This invention relates to certain new and useful improvements in casters; and it has for its object to provide a caster designed for furniture of all kinds, which shall be simple,
15 cheap, and durable, and which in practice shall be very efficient, and which can be readily attached to a bureau or other piece of furniture, and which, when once in place, will
20 not be liable to become dislodged as the furniture is moved about.

The invention consists in the peculiarities of construction and the novel combinations, arrangement, and adaptation of parts, all as
25 more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part
30 of this specification, and in which—

Figure 1 is a perspective view of a caster embodying my improvements. Fig. 2 is a central vertical section through the same, and
35 Fig. 3 is a central vertical section through the caster-wheel.

I am aware that a glass ball has been formed with lugs or trunnions having enlarged ends to receive the ends of the arms of the horn,
40 and hence do not seek to cover such construction.

It is necessary to pass the axle of the caster-wheel through a hole in the wheel, and where the ends of the axle are enlarged or
45 upset before being passed through the wheel the hole therein must necessarily be so large that there is considerable play between the parts, allowing the same to "wobble." This I wish to avoid, and do so by making my axle
50 of the same diameter throughout its entire

length, and upon each end form a circumferential groove to receive the ends of the arms of the horn.

Referring to the details of the drawings by letter, A designates the pintle, which is formed
55 with a cylindrical portion *a*, on which is sleeved loosely the hub of the horn B, provided with the arms *b*.

C is an enlarged head at the lower end of the pintle to prevent the horn from falling
60 off; and D is a washer on the pintle, above which washer the pintle is provided with the ridges *c*, extending lengthwise of the pintle and the whole length thereof above said washer. The end of the pintle is preferably,
65 though not necessarily, sharpened, as at *d*, to aid in its ingress into the wood of the article to which it is to be applied.

E is the caster-wheel, which may be of any suitable material, and is provided trans-
70 versely with the opening *e*, through which passes the axle F, which is of like diameter throughout its entire length, except for the annular grooves *f*, near the ends thereof. The ends of the horn B are separated, and are
75 adapted to embrace the axle at said grooves and be held thereto by clamping or bending the ends thereof round said axle at the grooves. By this construction of axle I am enabled to make the hole in the wheel of
80 nearly the same diameter as that of the axle, thus avoiding much play between the parts and avoiding wobbling. Besides, all danger of breaking the wheel by upsetting or riveting of the ends of the axle is avoided.
85

What I claim as new is—

In a furniture-caster, a wheel combined with an axle therefor of the same diameter throughout and provided near each end with a circumferential groove, and the horn hav-
90 ing its arms held in said grooves, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ALFRED M. SWAN.

Witnesses:

GEO. J. MUNROE,
M. P. SCHUSTER.