

No. 672,490.

Patented Apr. 23, 1901.

A. W. NORBLAD & L. B. MARKHAM.

PINTLE RETAINER.

(Application filed Sept. 22, 1900.)

(No Model.)

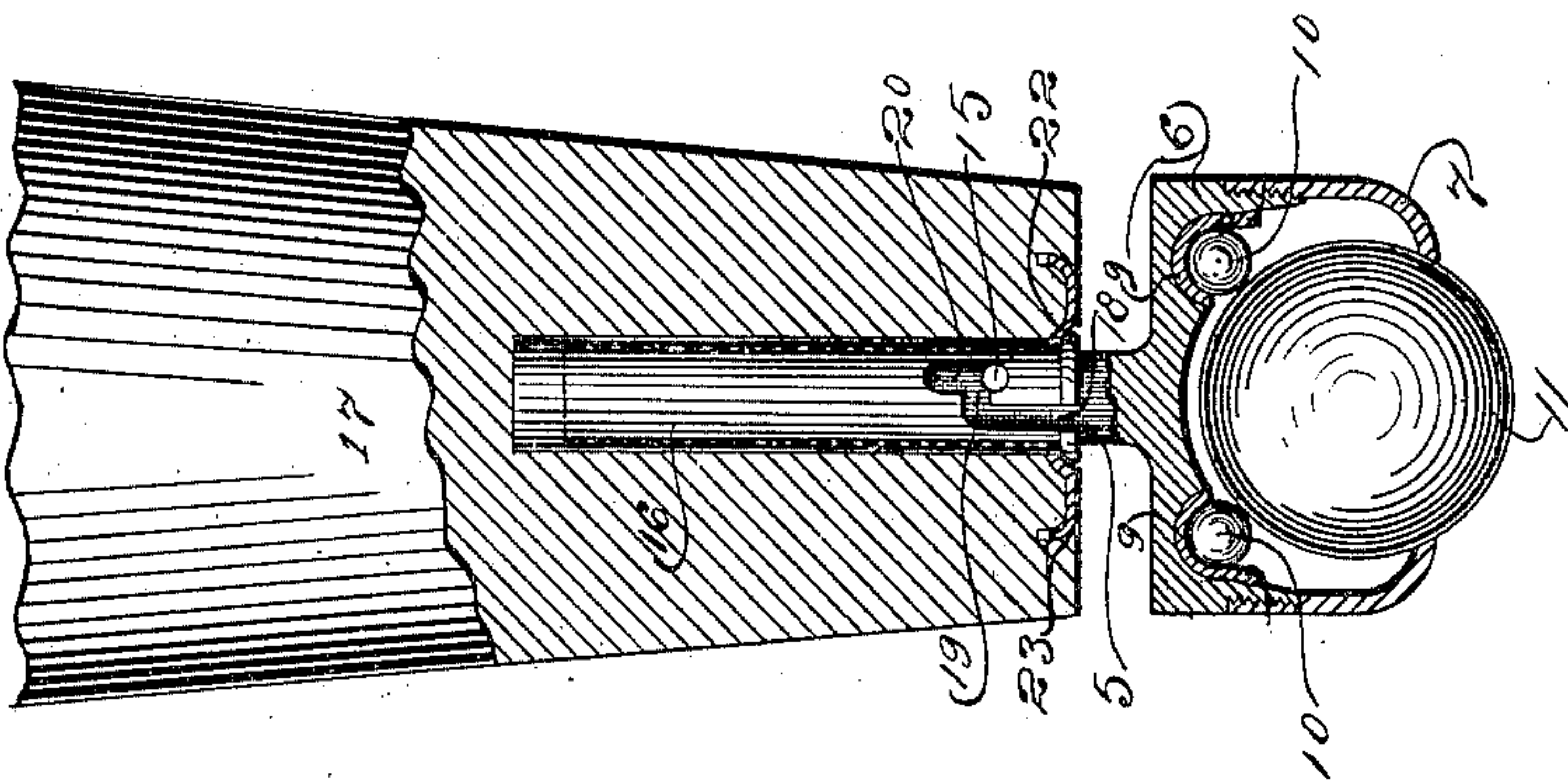


Fig. 2.

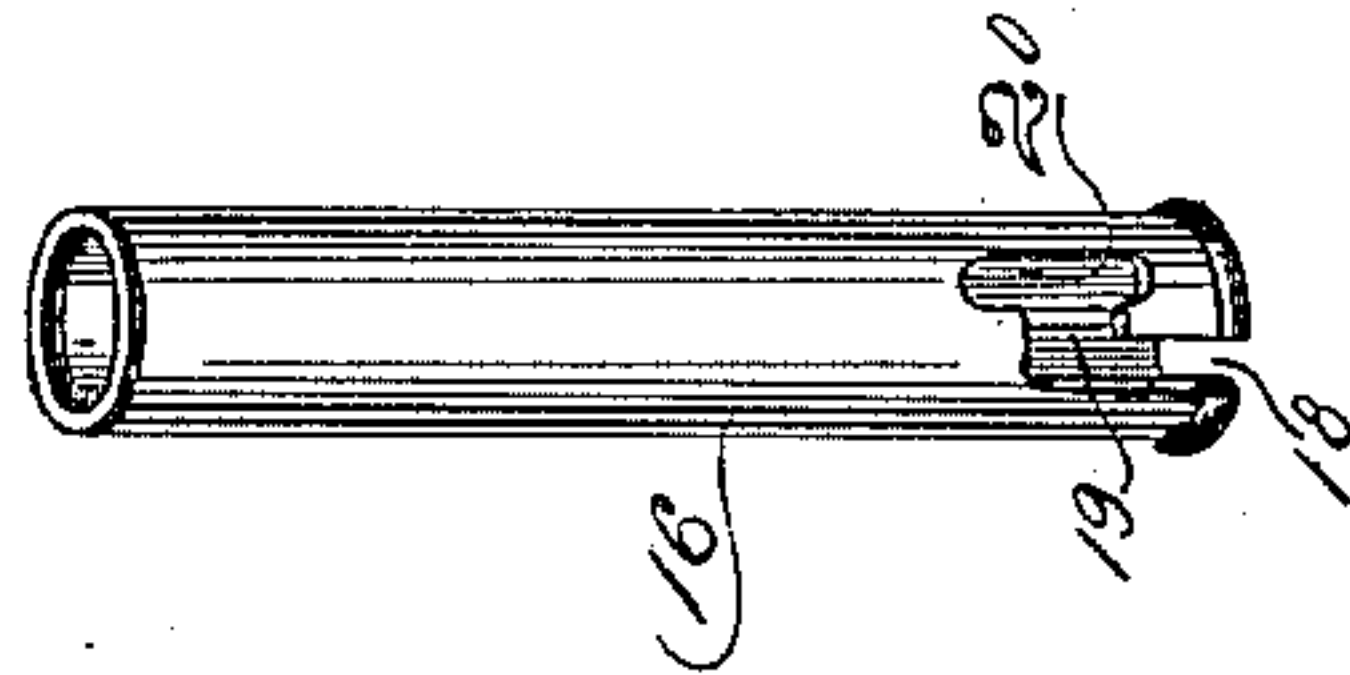


Fig. 3.

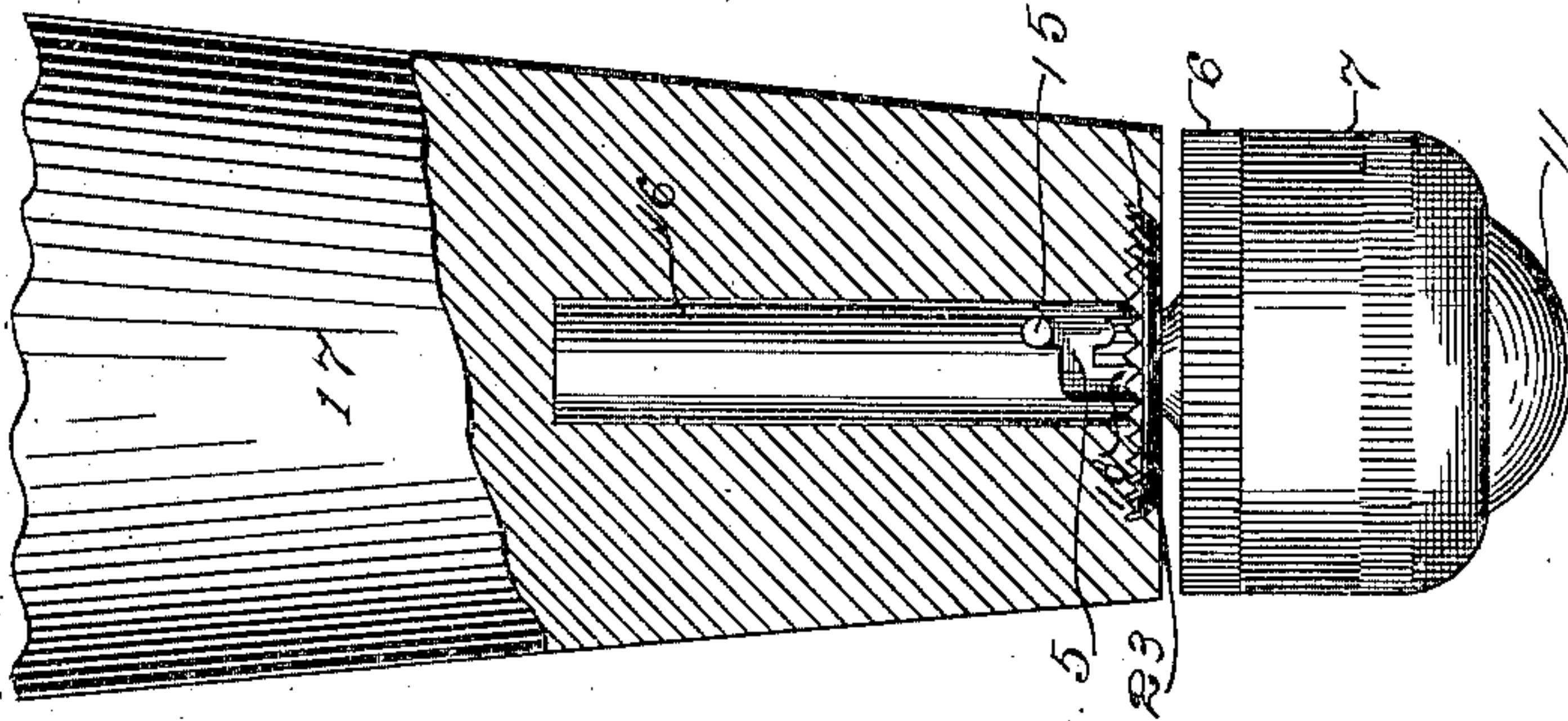


Fig. 1.

Witnesses

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UNITED STATES PATENT OFFICE.

ALBIN W. NORBLAD AND LESTER B. MARKHAM, OF GRAND RAPIDS,
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PINTLE-RETAINER.

SPECIFICATION forming part of Letters Patent No. 672,490, dated April 23, 1901.

Application filed September 22, 1900. Serial No. 30,790. (No model.)

To all whom it may concern:

Be it known that we, ALBIN W. NORBLAD and LESTER B. MARKHAM, citizens of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented a new and useful Pintle-Retainer for Ball-Bearing Casters, of which the following is a specification.

The invention relates to improvements in pintle-retainers for ball-bearing casters.

The object of the present invention is to improve the construction of pintle-retainers for ball-bearing casters and to provide a simple, inexpensive, and efficient construction adapted to enable the stem or pintle of a caster to be quickly engaged with and readily removed from an article of furniture and capable of preventing such stem or pintle from dropping from the article of furniture when the latter is raised.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a side elevation, partly in section, showing a ball-bearing caster applied to a leg of a table and provided with a pintle-retainer constructed in accordance with this invention. Fig. 2 is a vertical sectional view. Fig. 3 is a detail perspective view of the socket.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

5 designates a pintle or stem having a hollow casing - section 6 at its lower end, the outer face of which casing-section is threaded to receive a second section 7. The casing, which is provided with a ball-race 9, receives a large ball 11, which bears against an annular series of antifriction-balls 10, arranged in the said race.

The pintle or stem 5 is provided with a lug 15, projecting outwardly at a point above its lower end and adapted to be received within a bayonet-slot of a socket 16, which is adapted to fit within a recess of a leg 17 of a table or other article of furniture in the usual manner. The bayonet-slot of the socket is pro-

vided with a vertical entrance-slot 18, extending upward from the lower end of the socket, and a horizontal branch slot 19 extends laterally from the upper end of the main vertical entrance-slot 18 to vertical branches 20, extending upward and downward from the branch slot 19 and arranged to receive the lug of the stem when the caster is subjected to the weight of a piece of furniture and also when the socket supports the caster. In engaging the caster the stem 5 is inserted in the socket and the lug 15 moves upward in the main vertical entrance-slot 18 to the upper end thereof. The stem is then partially rotated to carry the lug through the horizontal branch slot 19 to the vertical branches 20. The weight of the article of furniture will hold the lug in the upper portion or branch 20, and if the article of furniture be raised the caster will drop slightly and the lug will be received within the lower vertical branch 20, which will prevent the caster from accidentally rotating and carrying the lug to the main vertical entrance-slot. The bayonet-slot will hold the lug in convenient position to enable it to be quickly removed when desired, and the said lug cannot accidentally leave the vertical branches 20.

The upper end of the bushing or socket is open, and the lower end is provided with an outwardly-extending flange 22, against which fits a ferrule 23.

It will be seen that the pintle-retainer is exceedingly simple and inexpensive in construction, that it is adapted to enable a caster to be readily connected with and detached from a piece of furniture, and that while preventing the caster from leaving the socket it will hold the lug adjacent to the lateral slot or branch 19.

What is claimed is—

In a device of the class described, the combination of a ball-caster provided with a stem and having a horizontal lug projecting from one side of the stem at a point between the ends thereof, and the cylindrical socket receiving the stem and provided with the main vertical entrance-slot 18 and having a horizontal branch slot 19 extending laterally from the upper end of the vertical entrance-slot

18, said socket being provided at the inner
end of the branch slot with vertical branches
extending upward and downward from the
branch slot 19 and arranged to receive the
5 lug of the stem when the caster is subjected
to the weight of a piece of furniture and also
when the socket supports the caster, the lower
vertical branch being short and arranged con-
tiguous to the horizontal branch 19, and adapt-
10 ed to hold the lug in convenient position to en-

able it to be quickly removed when the socket
is raised, substantially as described.

In testimony that we claim the foregoing as
our own we have hereto affixed our signatures
in the presence of two witnesses.

ALBIN W. NORBLAD.
LESTER B. MARKHAM.

Witnesses:

GEO. H. CORBIN,
JAMES FRIAR.