

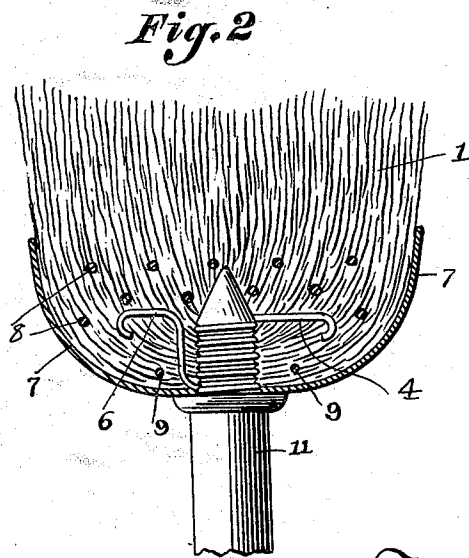
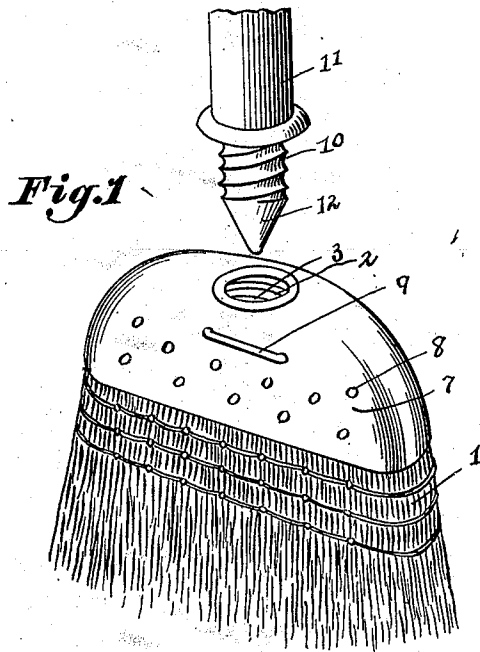
No. 655,251.

Patented Aug. 7, 1900.

F. R. LAY.
BROOM.

(Application filed Sept. 7, 1899.)

(No Model.)



WITNESSES:

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FRANK R. LAY, OF RIDGEVILLE, INDIANA.

BROOM.

SPECIFICATION forming part of Letters Patent No. 655,251, dated August 7, 1900.

Application filed September 7, 1899. Serial No. 729,681. (No model.)

To all whom it may concern:

Be it known that I, FRANK R. LAY, a citizen of the United States, residing at Ridgeville, in the county of Randolph and State of Indiana, have invented a certain new and useful Improvement in Brooms, of which the following is a specification.

My invention relates to the improvement of brooms; and the objects of my invention are to provide an improved construction of brooms, whereby the handle may be readily attached to or detached from the broom head or body, to so construct and arrange the parts thereof as to obviate any tendency toward the handle working loose from the broom, and at the same time provide a connection for said handle and broom which will produce a desirable degree of flexibility, and to produce other improvements in details of construction and arrangement of parts which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a broom and portion of a handle having my improvements therein, said handle being shown in position for entering the socket of the broom; and Fig. 2 is a sectional view through the broom-head, illustrating the manner of retaining the handle therein.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention I form the upper end of the broom head or body 1 with a vertical socket 2, within which is contained the body of a coiled spring 3. This spring is maintained in its position within the socket 2, first, by extending the inner end of the rod or wire forming the spring laterally, as indicated at 4, and causing said laterally-extending arm to engage the material 5 of which the broom is formed, and, second, by extending the outer end of the wire or rod which forms the spring inward to a point opposite one end of the spring and thence outward in a direction opposite the arm or extension 4, as indicated at 6. In constructing brooms of this class I may inclose the head or upper end thereof with a shield or cap, of sheet metal or other suitable material, as indicated at 7, the latter serving to bind the upper ends of the

straws or material forming the broom into a compact form and being united with the broom material through the medium of transverse nails 8, the inner ends of which may be clenched against the opposite side of the shield or casing 7. As indicated at 9, I also preferably employ a staple which passes transversely through the outer end of the cap or casing 7 and the parallel arms of which pass through the broom material on opposite sides of the spring and assist in holding the broom fibers in place. The wire coils forming the spring 3 serve, as will be understood from the drawings, to form threads, which will permit of the threaded termination 10 of a broom-handle 11 being screwed tightly therein. In constructing this threaded portion 10 it is provided with a tapering termination or extension 12, which is unthreaded and which, in the manner indicated in Fig. 2 of the drawings, inserts itself when the handle is screwed into connection with the broom-head into the material forming said head. Although the coiled socket-spring is herein shown of an equal diameter, it is obvious that the same may be made to taper toward the inner end, if desired.

From the construction above described it will readily be seen that simple, reliable, and effective means are provided for producing a detachable connection of the handle and broom-head and that the coiled spring which provides the receiving-threads permits of employing threads on the handle extension of unusual depth, which will greatly aid in forming a comparatively-rigid connection of the spring and handle. It will also be seen that by providing the extension 11 with comparatively-deep tapering threads which will enter the spaces between the wire coils in a wedge-like manner the coils of said spring will be expanded and the spring thereby tightened or shortened in its connection with the broom-head. It will also be observed that by employing the coiled spring as a medium of connection between the handle and the broom-head a comparatively flexible or yielding connection between said broom head and handle is produced, which has been found to be exceedingly desirable in the use or manipulation of the broom.

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

5 1. In a broom, the combination with a broom head or body 1 having a socket and a coiled spring retained in said socket, of a broom-handle having a threaded portion 10 adapted to be screwed into said coiled spring, said portion 10 being provided with a taper-
10 ing unthreaded extension 12, substantially as specified.

2. In a broom, the combination with a broom head or body 1 having a socket therein;

a coiled spring inserted in said socket the inner end of the wire forming said coil extending laterally and engaging the material forming the broom-head and the outer end of said coil-wire being turned inward and also engaged with said broom material, of a handle having a threaded portion adapted to be
20 screwed into said socket-coil, substantially as specified.

FRANK R. LAY.

In presence of—

C. C. SHEPHERD,
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