

J. M. WRIGHT.
SAFETY PIN.

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984,409.

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Fig. 1.

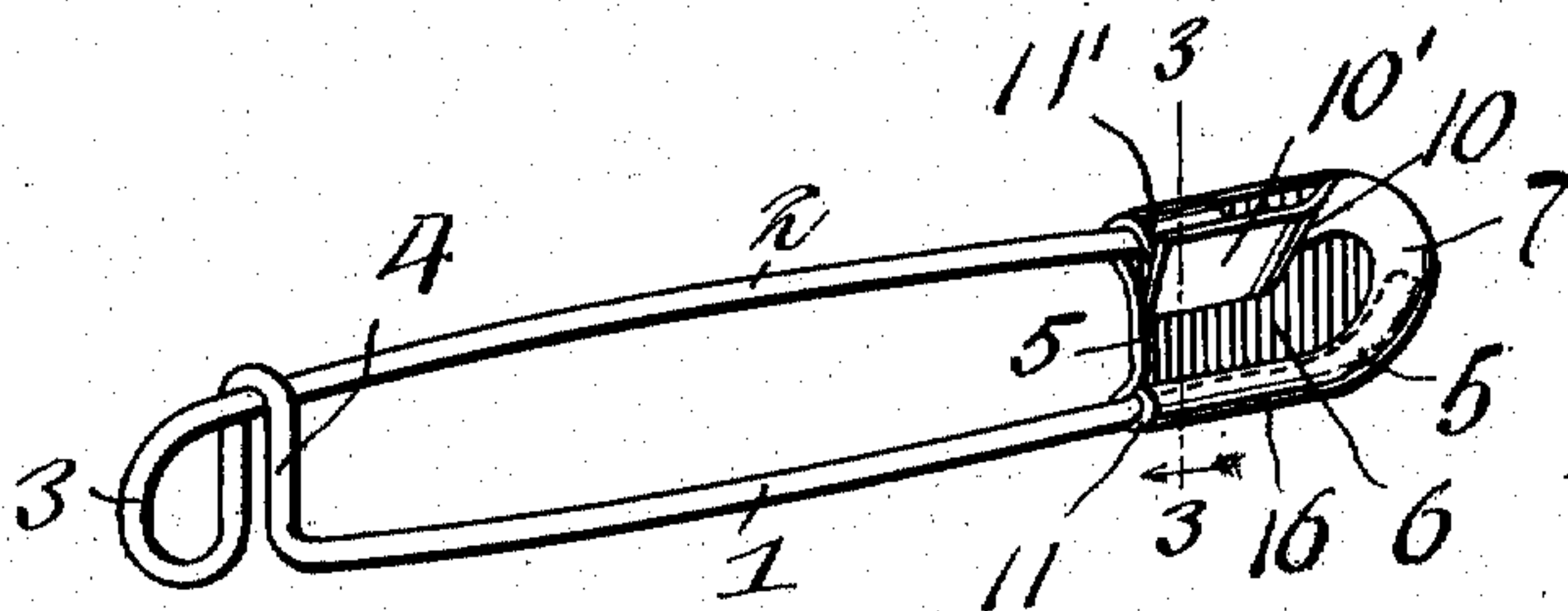


Fig. 2.

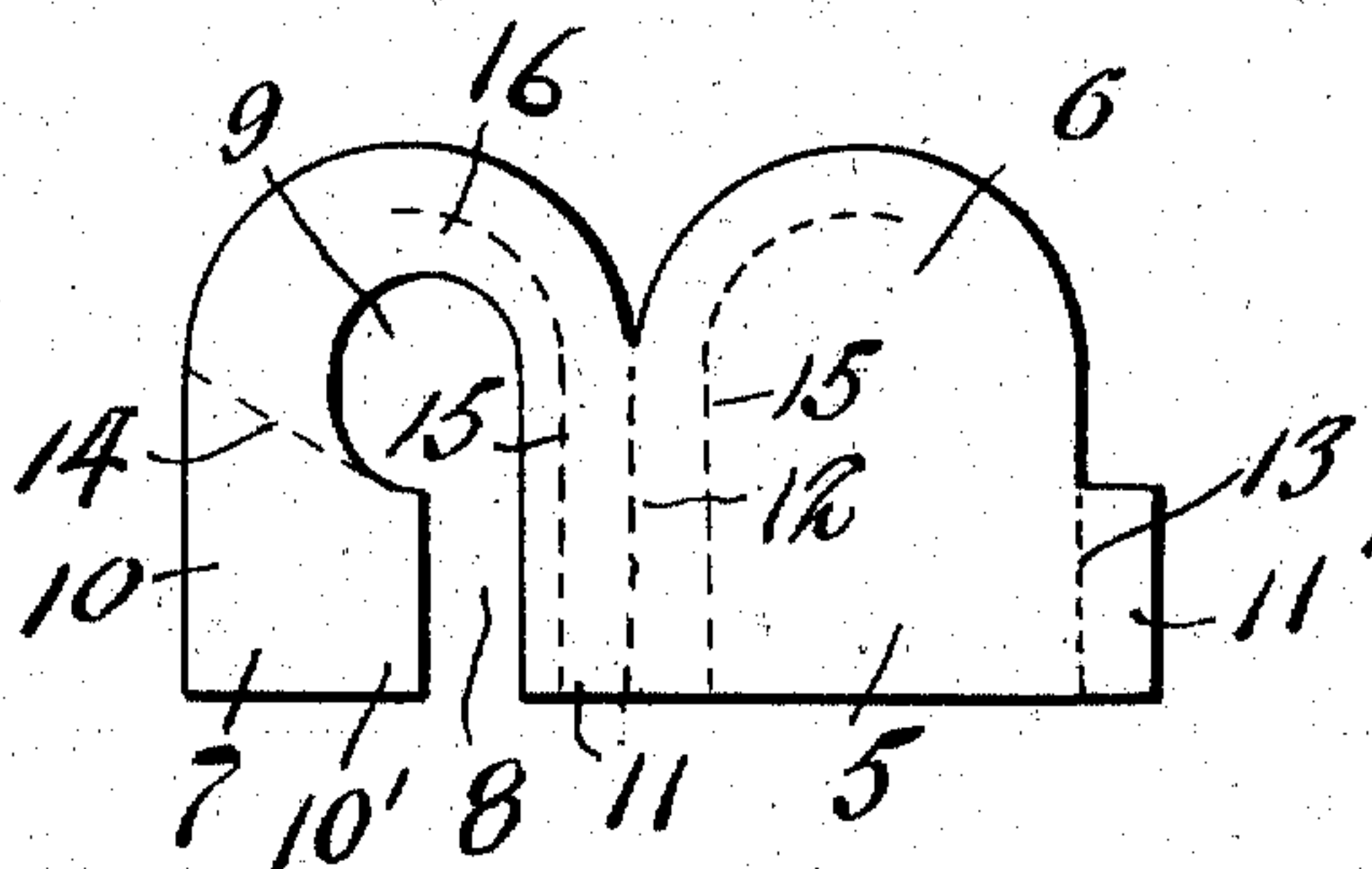
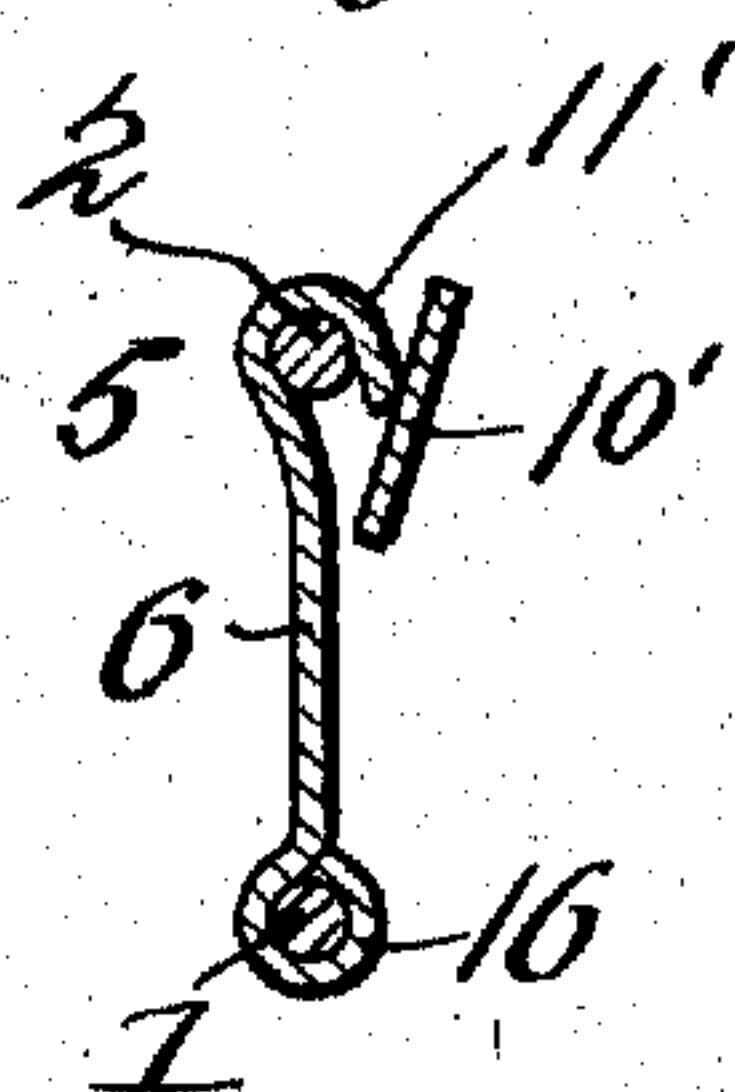


Fig. 3.



Witnesses

Hugh H. Ott
C. C. Hines.

Inventor
James M. Wright

By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

JAMES M. WRIGHT, OF KEOKUK, IOWA.

SAFETY-PIN.

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To all whom it may concern:

Be it known that I, JAMES M. WRIGHT, a citizen of the United States, residing at Keokuk, in the county of Lee and State of Iowa, have invented new and useful Improvements in Safety-Pins, of which the following is a specification.

This invention relates to safety pins, one object of the invention being to provide a pin having a coil or spring portion of novel construction, to prevent the material engaged by the pin from crowding and becoming caught or entangled in the coil.

Another object of the invention is to provide a safety pin having a novel construction of guard by which the free end of the pin section is adapted to be held in a secure manner so as to absolutely prevent the accidental disengagement of the pin section from the guard from the strain falling upon the pin.

The invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a perspective view of a safety pin embodying my invention, showing the pin section engaged with the guard. Fig. 2 is a plan view of the blank from which the guard is made. Fig. 3 is a cross section on the line 3—3 of Fig. 1.

The body of the safety pin is made of a single piece of wire bent to provide the back section 1 and the fastening pin section 2. These sections are united at one end by bending the wire to form an eye 3, which eye serves the function of a spring coil adapting the pin section 2 to be pressed toward the back section 1, and to force said pin section normally away from said back section. The free end of the eye 3 is connected with the outer end of the back section 1 by a looped or U-shaped portion 4, the bight of which embraces the adjacent end of the pin section 2, and which serves as a shield or stop to prevent the material with which the pin is engaged in use from coming in contact with and becoming entangled in the spring loop or coil. In addition the loop 4 serves as a guide for the pin section and prevents any tendency to lateral movement thereof, thus obviating the necessity of making the spring coil of a plurality of convolutions for this purpose as will be readily understood.

A sheet metal guard or shield 5 is fixed to the free end of the back section 1 and is provided with means for receiving and retaining the free end of the pin section 2. This guard is formed from a blank of sheet metal, of the character shown in Fig. 2, centrally divided to form two leaves or main sections 6 and 7 having outer curved ends. The section 6 is imperforate, while the section 7 is formed with a longitudinal slot 8 opening through its inner straight edge and having at its outer end an enlargement 9 producing relatively broad and narrow spaced longitudinal portions 10 and 11, which are adapted to be disposed on opposite sides of the back and pin sections, as shown, the portion 10 having an inward extension 10'. The inner edge of the leaf 6 is also formed with an extension 11'.

In forming and applying the guard, the blank is first folded in the central dotted line 12 to dispose the leaves in substantially parallel relation, the extension 11' of the leaf 6 bent downwardly on the dotted line 13 beyond the inner side of said leaf into hook form, the forward portion and extension 10' of the leaf 7 bent at an angle on the dotted line 14 to lie opposite and at a reverse angle to the hook 11', the guard slipped on the free end of the back section 1 so as to bring the latter into the central fold, and the portions of the leaves on opposite sides of the fold line 12 and up to and along the dotted line 15 bent by a suitable tool to form a bead or loop 16 gripping said free end of the back section 1 to fasten the guard in position thereon.

By the construction described, the section 6 of the guard will be disposed as shown at one side of the back and pin sections, with the free end of the back section 1 held and confined within the bead 16, while the portions 11' and 10' will be respectively spaced in such relation as to provide a spring hook to receive and hold the pointed free end of the pin section 2 and a spring arm guarding said hook to retain said free end of the pin section in applied position. The guard being made of spring metal it will be obvious that when the free end of the pin section is forced down on the hook 11' into the space between the hook and arm, the latter will yield and permit said free end of the pin to pass under the hook, as shown in Figs. 1 and 3, the arm 10' then returning to normal position to hold the pin against any

possibility of casual displacement from the hook. In order to release the free end of the pin, it is simply necessary to press the same farther toward the back section 1, 5 when the pin will engage the lower or inner edge of the inclined arm below the hook and force said arm outwardly, thus allowing the pin by its spring action to pass upwardly through the space thus created between the 10 arm and bill of the hook.

By the described construction of the guard the free end of the pin may be easily and quickly connected therewith and disengaged therefrom, and when the pin is fastened it 15 will be held firmly and securely against possibility of casual disengagement under any and all of the strains to which it is ordinarily subjected in use.

Having thus described the invention what 20 is claimed as new is:—

A safety pin comprising a back section, a spring actuated pin section, and a guard member fixed upon the free end of the back section to receive the free end of the pin 25 section, said guard member being formed

from a strip of sheet metal providing oppositely arranged leaves, one of said leaves being imperforate and having a laterally inbent lip extending downwardly at an acute angle from the said leaf to form a 30 hook, and the other of said leaves being longitudinally slotted for a portion of its length to provide a flexible tongue disposed longitudinally of and facing the free side edge of the said hook at a reverse inward incline 35 relative to the said hook, said tongue contacting throughout the free side edge of the said hook centrally thereof, whereby portions of the tongue will project beyond opposite sides of the latter, so that upon lateral movement of the pin section it will disengage from the hook and simultaneously 40 displace the tongue for the free removal of the said pin section from the guard member.

In testimony whereof I affix my signature 45 in presence of two witnesses.

JAMES M. WRIGHT.

Witnesses:

G. R. PARSONS,
JAMES CAREY.