A. HAMILL.

TACK.

APPLICATION FILED FEB. 24, 1913.

1,087,580. Patented Feb. 17, 1914.

Fig. 1.

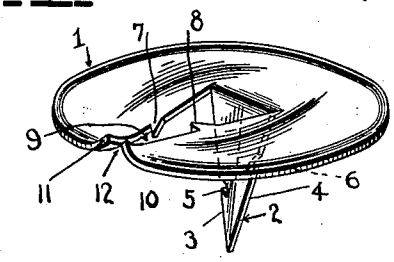


Fig. 2.

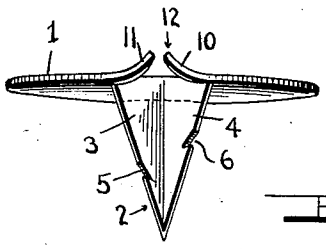


Fig. 3.

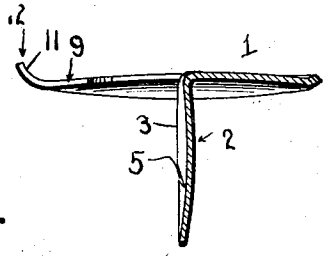


Fig. 6.

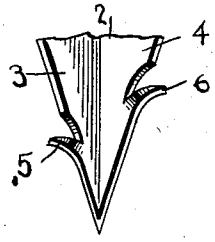


Fig. 4.

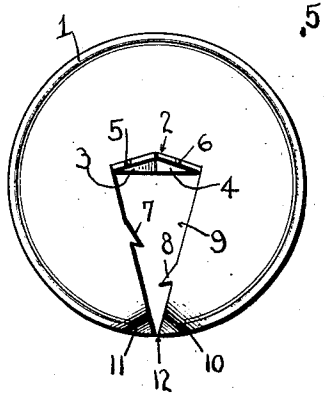
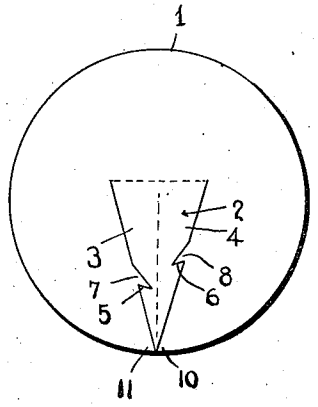


Fig. 5.



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UNITED STATES PATENT OFFICE.

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TACK.

1,087,580. Specification of Letters Patent. Patented Feb. 17 1914.

Application filed February 24, 1913. Serial No. 750,401.

To all whom it may concern:

Be it known that I, ALEXANDER HAMILL, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Tacks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in sheet metal tacks or roofing nails adapted to be constructed in different sizes for various purposes.

The object of the invention is to provide a simply constructed and efficient tack of this character the blank of which may be struck out from a sheet of metal in a single operation.

Another object is to provide a tack of this class the shank of which is constructed to render it rigid and strong to adapt it to withstand the force necessary to drive it into the object into which it is to be inserted.

A further object is to provide a tack of this class the head of which is convexed on its outer face by the angling of the shank and which is provided with converging article pressure fingers.

With these and other objects in view, the invention consists of certain novel features of construction and the combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings: Figure 1 is a perspective view of this improved tack; Fig. 2 is a side elevation thereof; Fig. 3 is a vertical section taken at right angles to Fig. 2; Fig. 4 is a bottom plan view of the tack; Fig. 5 is a similar view of the blank from which the tack is formed; Fig. 6 is a front view of a portion of the prong showing the spurs thereof deflected.

In the embodiment illustrated this improved nail or tack is constructed from a single blank sheet of metal as shown clearly in Fig. 5 and comprises a circular head or body portion 1 provided with a single prong or shank 2 formed by stamping a V-shaped member from said disk or head beginning with a point at the edge or periphery of said disk and gradually broadening toward the base of said prong. The base of the prong extends beyond the center of the head and is bent at right angles to the head and then folded longitudinally to render it strong and rigid and adapt it to withstand blows from a hammer when necessary for forcing the shank or prong into the roof or other object into which it is to be driven. The flanges 3 and 4 formed by the folding or bending longitudinally of the prong taper toward the free end of the prong forming a needle point to said prong to facilitate its insertion into an object, which is especially desirable when the device is in the form of a thumb tack.

The prong 2 is preferably notched at opposite sides thereof to form spurs 5 and 6 to prevent the accidental withdrawal of the tack after it has been inserted. In forming these notches during the stamping operation tongues 7 and 8 are produced on the head at opposite sides of the slot which is formed by the striking out of the prong and these tongues may remain or be cut off as desired. These spurs 5 and 6 may be arranged in alinement with the flanges 3 and 4 as shown in Fig. 2 or they may be deflected as shown in Fig. 6 if preferred. The triangular slot or recess 9 formed by the striking out of the prong extends through one edge of the head and provides resilient gripping fingers 10 and 11 which are drawn toward each other by the longitudinal folding of the prong thereby producing a convexed shape to the outer face of the head as shown clearly in Fig. 1. The free ends of these fingers 10 and 11 are bent upwardly as shown at 12 to prevent them from puncturing the article into which the tack is driven and to provide curved lower bearing faces for yieldingly engaging the face of the article into which the tack is driven and causing said tack head to snugly engage said article.

The prong 2 extends beyond the center of the disk or head to adapt it to be made of greater length than the radius of said head, long shanks being often desirable for tacks of this character especially for those used for securing roofing papers and building linings.

While I have described my invention with more or less minuteness as regards details and as being embodied in certain precise forms, I do not desire to be limited thereto unduly any more than is pointed out in the claims. On the contrary, I contemplate all proper changes in form, construction and arrangement, the omission of immaterial elements and substitution of equivalents as circumstances may suggest or render expedient.

I claim as my invention:

1. A tack composed of a single piece of sheet metal having a prong struck out therefrom, said prong being bent at right-angles thereto and folded longitudinally throughout its length.

2. A tack composed of a single piece of sheet metal having a prong struck out therefrom, the point of said prong beginning at the edge of the metal sheet and gradually broadening toward its base forming a slot in said sheet opening through one edge thereof, said prong being bent at right-angles to the sheet and folded longitudinally.

3. A tack composed of a single piece of sheet metal having a prong struck out from said sheet through one edge thereof forming yieldable gripping fingers having their ends upturned.

4. A tack composed of a sheet metal disk slit from its interior through its edge to form a tapered prong with its point extending outwardly, said prong being bent at right-angles to said disk.

5. A tack composed of a sheet metal disk having slits extending from a point near its center through its periphery, said slits converging toward the periphery of said disk to form a tapered prong having a wide base disposed near the center of said disk, said prong being bent at right-angles to said disk and folded longitudinally, the fold decreasing in depth from the point of the prong inward, said disk having its outer face convexed and provided with gripping fingers extending outward.

6. A tack comprising a sheet metal head having slits extending from its periphery inward and diverging toward their inner ends forming a triangular tongue, said tongue being folded longitudinally and bent at right angles to said head to form a shank, said head having the points at its periphery formed by said slits bent laterally in a direction opposite to said shank.

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

ALEXANDER HAMILL.

Witnesses:
L. O. HILTON,
M. H. STUARD.