G. PESENTI.

HOLLOW NAIL.

APPLICATION FILED MAY 15, 1914.

1,154,881. Patented Sept. 28, 1915.

FIG. 1

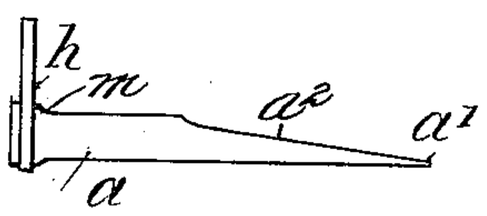


FIG. 2.

FIG. 3.

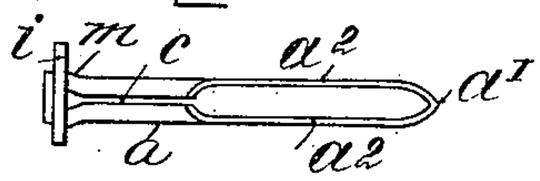


FIG. 4.

FIG. 5.

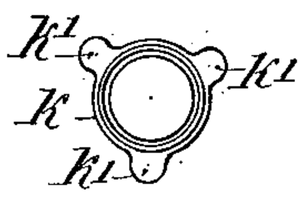


Fig. 6.

FIG. 7.

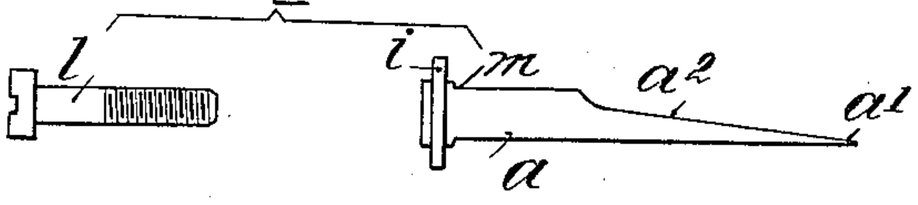
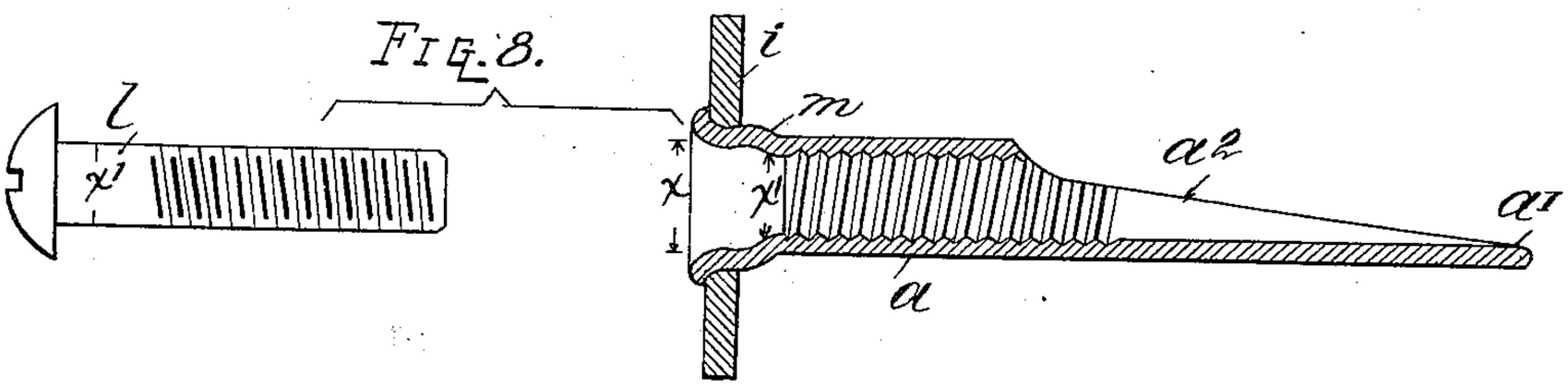


FIG. 8.



Witnesses
O. A. Putnam.
L. C. Barkley.

Inventor.
Guido Pesenti
per Frank S. Ackerman
Attorney.

UNITED STATES PATENT OFFICE.

GUIDO PESENTI, OF PARIS, FRANCE, ASSIGNOR TO MARIO PESENTI, OF PARIS, FRANCE.

HOLLOW NAIL.

1,154,881. Specification of Letters Patent. Patented Sept. 28, 1915.

Application filed May 15, 1914. Serial No. 838,747.

To all whom it may concern:

Be it known that I, GUIDO PESENTI, a subject of the King of Italy, residing at 47 Rue du Simplon, Paris, in the Department of Seine, France, have invented a new and useful Improvement in Hollow Nails, of which the following is a specification.

The present invention relates to improvements in hollow or tubular nails, intended to receive a removable head.

One object of the present invention is to reinforce and to protect the portion of the head of the nail which receives the hammer blows.

The present invention has some particular reference to that kind of hollow nail which is tapped internally in order to receive a screw or a screw-threaded removable head.

Embodiments of this invention are illustrated in the annexed drawings, in which—

Figure 1 is a side elevation of a hollow nail in accordance with the present invention, provided with a head in the form of a hook. Fig. 2 is an end view of Fig. 1. Fig. 3 is a plan of a hollow nail provided with a collar forming a fixed head. Fig. 4 is an end view of Fig. 3. Figs. 5 and 6 are elevation and plan respectively of a removable ornamental head adapted to cover the fixed head shown in Figs. 3 and 4. Fig. 7 is an elevation of a nail tapped internally to receive a screw or the like with a screw-threaded shaft two parts being shown separate, and Fig. 8 is a vertical section to an enlarged scale of a construction similar to that illustrated in Fig. 7.

The hollow nail in accordance with the present invention is formed of a tubular cylindrical member *a* formed of a piece of sheet steel cut out and bent round so as to leave a longitudinal slot *c* and cut off along a certain portion of its length obliquely in the form of a whistle so as to form a point *a'* on the cutting edges a^2. (See Figs. 1, 3, 7 and 8).

With special reference to the construction shown in Figs. 1 and 2, a piece *h* forming a hook is fixed to the head of the nail by swaging or other means. Similarly a rosette or collar *i* (Figs. 3 and 4) which may carry ornaments of any desired kind, may be fixed to the head of the nail.

Figs. 5 and 6 show an example of ornamental stud *k* constructed to cap the collar *i*. The said stud is provided with projections or tongues *k'*, which can be clenched over the collar. This stud *k* can bear any ornamentation or pattern whatever.

The nail may also be internally tapped throughout its tubular portion in order to receive a screw *l* as shown in Figs. 7 and 8; or instead, an ornamental piece or useful member of any kind fitted with a screw-threaded shaft.

In accordance with the present invention, in order to insure that the screw thread tapped in the interior of the nail *a* shall not be damaged by the hammer blows when the nail is driven in, the nail is constructed while keeping in mind the following considerations: Firstly, the mouth of the hollow portion of the nail is made a little larger internally than the tapped portion in order that the internal screw thread shall only start at a certain distance from the mouth while retaining a free passage for the screw. Secondly, the mouth of the hollow portion of the nail thus enlarged, is reinforced by a shoulder or rib by an exterior ring hooked or swaged around the mouth of the nail and supported by the shoulder or rib.

The section shown in Fig. 8 shows clearly that the interior diameter *x* at the mouth of the hollow portion of the nail is a little larger than the diameter *x'* of the screw *l*. A swelling or exterior rib *m* is provided upon the nail *a* in front of the screw thread and a ring *i* is hooped or swaged upon the nail *a* at the mouth of the nail and supports the shoulder or rib *m*. In consequence of this characteristic arrangement, the hammer blows with which the nail is struck for driving it in cannot in any way whatever damage the screw thread formed on the interior of the nail *a*. Further, the mouth of the nail instead of contracting under the hammer blows has a tendency rather to hold to its shape. The shoulder *m* at the same time as serving for a support for the ring *i* forms an elastic damping device and prevents the internal threads from being crushed. When the nail is driven into the wall either partially or completely, it is possible then always to screw in the screw *l* in the tubular portion *a*.

The hollow nail in accordance with the present invention can be employed by itself for all purposes for which nails are employed either in building, carpentry, packing goods, shoe-making, cabinet making and so forth. In combination with a movable head it may be applied to all kinds of uses

of which those mentioned above are quoted by way of example.

What I claim is:—

1. A hollow or tubular nail, intended to receive a movable head, consisting of a hollow member provided with a shoulder near its mouth and a reinforcing ring swaged around the extremity of the hollow member, and bearing against the said shoulder.

2. A hollow or tubular nail consisting of an internally tapped hollow member, but with an internal non-tapped portion near its mouth and having a larger diameter than the tapped portion, and provided with an external reinforcing shoulder, a reinforcing ring swaged around the extremity of the hollow member, and bearing against the said shoulder, and a removable head provided with a screw threaded shaft for engagement with said hollow member.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GUIDO PESENTI.

Witnesses:
PAUL CAQUET,
CHR. P. PROWLY.