H. P. McMILLAN.

WIRE NAIL.

APPLICATION FILED JUNE 9, 1909.

978,185.

Patented Dec. 13, 1910.

Fig. 1.

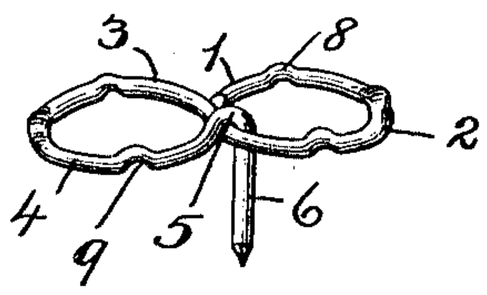


Fig. 2.

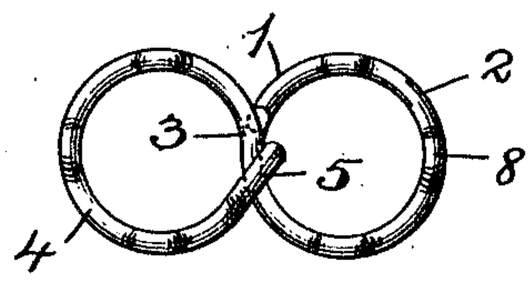


Fig. 3.

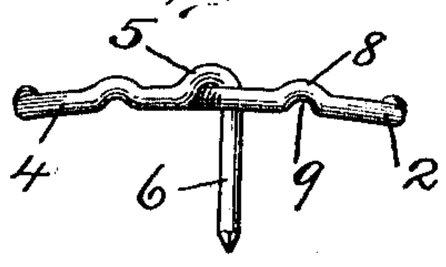
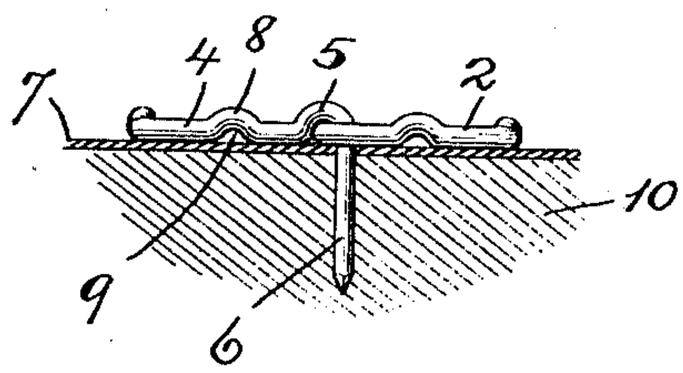


Fig. 4.



Witnesses

Edwin L. Bradford

G. Ferdinand Vogt.

Inventor

Hugh P. McMillan

By Munn & Co.,

Attorneys,

UNITED STATES PATENT OFFICE.

HUGH P. McMILLAN, OF BALTIMORE, MARYLAND.

WIRE NAIL.

978,185. Specification of Letters Patent. Patented Dec. 13, 1910.

Application filed June 9, 1909. Serial No. 501,145.

To all whom it may concern:

Be it known that I, HUGH P. McMILLAN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Wire Nails, of which the following is a specification.

This invention relates to improvements in wire nails and has particular reference to nails suitable for securing papers and fabrics to the roofs and walls of wooden buildings or structures.

One object of the invention is to provide an improved construction of nail having a substantially central prong and a plurality of eccentric loops formed integrally therewith and serving as a head.

Another object is to provide an improved nail comprising a plurality of loops one of which overlaps another and forms a driving head with a prong extending inwardly from said driving head, and a further object is to provide an improved looped wire nail having recessed under sides for the escape of water from within the loop.

With these and other objects in view the invention is illustrated in the accompanying drawing wherein—

Figure 1 is a perspective of the improved nail. Fig. 2, a plan view of the same. Fig. 3, a side elevation thereof, and Fig. 4, a sectional view through a portion of a fabric covering over a wooden structure with the nail driven therein to secure the fabric in place.

Referring to the drawing the numeral, 1, designates one end of a strand of wire bent into the form of a loop, 2, and having a reversely-curved or bent intermediate portion, 3, from which a second loop, 4, is formed. This latter loop, 4, is provided adjacent the intermediate portion, 3, with an out-turned or arched bend, 5, which projects over and around the said portion, 3, and from said arch or bend, 5, the opposite end, 6, of the wire turns inwardly to form the nail proper which is to be driven into the wood.

The arch or bend, 5, serves two purposes in that it acts as a head to receive the blows of a tool to drive the nail in place and it also clenches or grips the intermediate portion, 3, and prevents spreading of the loop, 4, when the nail is driven home.

The loops, 2, and, 4, are preferably slightly inclined downwardly from the intermediate portion, 3, as shown in Fig. 3, so that when driven, the extreme edges will contact before the intermediate portion and thus avoid liability of those ends springing upwardly as the said intermediate portion is driven in place. The loops, 2, and, 4, and intermediate portion, 3, it will therefore be seen constitute the head.

It has been found that if the loop portions of the nail are driven into continuous contact with the fabric, 7, that water will accumulate therein and will gradually work into the pores of the paper fabric and rot it out around the loops. To avoid this I provide each loop with one or more outward bends, 8, forming arched recesses or openings, 9, at the inner side of the loop and by means of these openings the water may drain off.

By means of the double loop head formation the nail has a comparatively large surface in contact with the fabric so that when driven into the wood structure, 10, the paper fabric will be held close against the wood.

It is obvious that the loops need not be of a circular formation but may have an angular formation and it should be understood that the term loop is herein employed in this broader light.

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

1. A nail formed of a single strand of wire and having a driving prong and two loops,—one extending laterally from one side of the driving prong and the other extending laterally from the other side of the driving prong.

2. A nail formed of a single strand of wire and comprising a plurality of loops one of which overlaps another and forms a driving head and having a driving prong turned inwardly from said head.

3. A nail formed of a single strand of wire and having a driving prong and a loop formed integrally therewith,—said loop being provided at its inner side with a recess for the escape of water from the loop.

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

HUGH P. McMILLAN.

Witnesses:
J. HOOPER EDMONDSON,
MORTON P. TOTTLE.