

(No Model.)

P. GENDRON.

SECURING TRIMMINGS UPON TUBULAR AND OTHER BODIES.

No. 419,009.

Patented Jan. 7, 1890.

Fig. 1.



Fig. 2

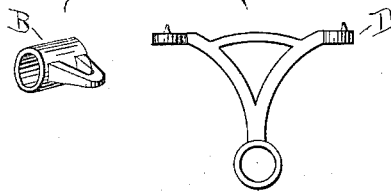


Fig. 3

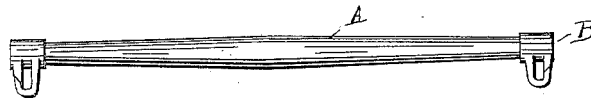
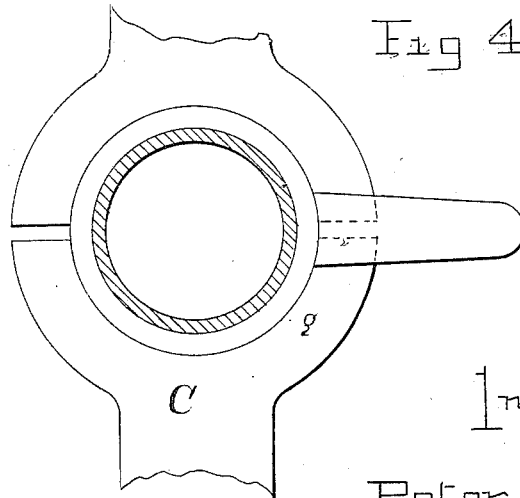


Fig. 5



Fig. 4



Witnesses:

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By James Whittemore

Atty

UNITED STATES PATENT OFFICE.

PETER GENDRON, OF TOLEDO, OHIO, ASSIGNOR TO THE GENDRON IRON
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SECURING TRIMMINGS UPON TUBULAR AND OTHER BODIES.

SPECIFICATION forming part of Letters Patent No. 419,009, dated January 7, 1890.

Application filed October 21, 1889. Serial No. 327,728. (No model.)

To all whom it may concern:

Be it known that I, PETER GENDRON, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have
5 invented certain new and useful Improvements in the Process of Securing Trimmings upon Tubular and other Bodies, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to new and useful improvements in a process of applying malleable trimmings to cylindrical or polygonal bodies; and the invention is designed to be used in the manufacture of carriages and
15 wagons in applying such trimmings to whiffletrees, axles, and other similar bodies.

In the present state of the art such trimmings are applied by clamping them in position by means of clamping-bolts, by placing
20 them upon the body when hot and allowing them to shrink tight, or by driving the trimmings on the tapering part of the body. My method has for its object the overcoming of the objections to which these former methods are
25 subject; and it consists in applying the metal trimmings loosely upon the body to which they are to be secured, and then applying pressure upon the outside of the trimmings sufficient to tightly compress the trimmings
30 upon and into the body against danger of displacement.

In the drawings which accompany this specification, Figure 1 shows a tubular body to which a malleable trimming is desired to
35 be secured. Fig. 2 shows the metal trimming to be applied upon such a tubular body. Fig. 3 shows a whiffletree with the metal trimming in place. Fig. 4 shows the manner of applying the dies and compressing the trimmings upon the body. Fig. 5 shows a poly-
40 gonal body having trimmings applied upon it by my process.

A is a tubular body—such, for instance, as the body of a whiffletree—upon which the metal trimmings B or whiffletree-hooks are
45 desired to be secured. This hook has the usual tubular portion, being made of slightly larger diameter than the outside of the body A, and is made of malleable casting. This
50 trimming I place in its desired position upon the body A, as shown in Fig. 3, and then place it between dies C, which latter are made of a

shape to conform to the shape of the trimming. Pressure is then brought to bear upon the dies in any suitable manner, as by means
55 of a hydraulic press or leverage, until the pressure is sufficient to reduce the inner diameter of the tubular portion of the trimming, setting it tightly upon its adjusted position on the body. This pressure would be
60 sufficient to prevent any danger of displacement from strain upon the trimming. The only way in which it could be displaced would be to break it. The result of this pressure is to press the trimming slightly onto the body,
65 forming a seat therein, such as *a* in Fig. 1. This of course is but a slight indentation, but sufficient to prevent any possible lateral movement.

D shows another form of trimming, which
70 it is sometimes desired to place upon tubular bodies—as, for instance, in my application for patent filed concurrently herewith for improvements in wagons, the bracket—such as D—being used for the rear bolster.

E is the trimming as applied to a body of
75 polygonal shape.

While I show my invention as applied to tubular bodies, it is apparent that it may be applied to solid bodies as well, and I do not
80 desire to limit myself to the application of my process to tubular bodies. When pressure is applied upon the malleable trimming in this way, the diameter being lessened, the casting is materially strengthened, being compressed
85 and thickened, so that it not only forms a tighter joint than by other methods previously used, but also lengthens the life of the casting, and there is no danger of breaking
90 it by blows or otherwise in applying it.

What I claim as my invention is—

The process herein described of securing trimmings to tubular and other bodies, consisting of placing a trimming in position on
95 a tubular body and compressing the same into the metal of the body, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 11th day of
October, 1889.

PETER GENDRON.

Witnesses:

ED. MCBREARTY,
P. M. HULBERT.