M. L. SPIRA.

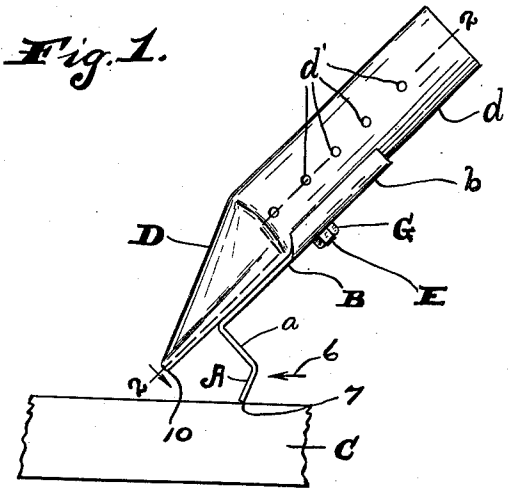
PAINT REMOVING DEVICE.

APPLICATION FILED JUNE 7, 1913.

1,074,755.

Patented Oct. 7, 1913.

Fig. 1.



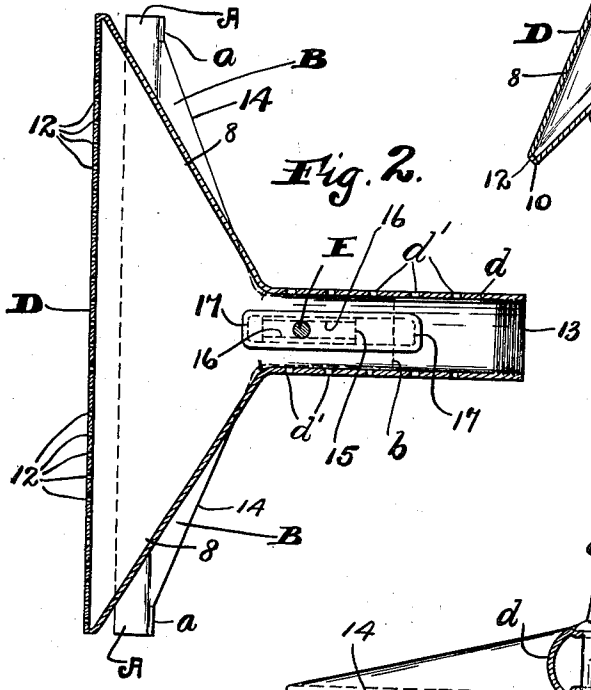


Fig. 2.

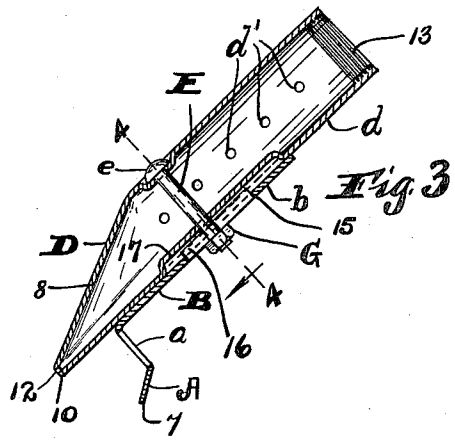


Fig. 3.

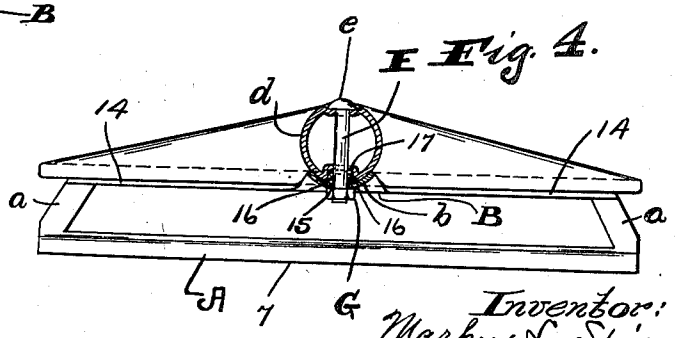


Fig. 4.

Witnesses:
H. J. Gettins.
B. C. Brown.

Inventor:
Markus L. Spira
By Spear & Ware
Attorneys.

UNITED STATES PATENT OFFICE.

MARKUS L. SPIRA, OF CLEVELAND, OHIO.

PAINT-REMOVING DEVICE.

1,074,755. Specification of Letters Patent. Patented Oct. 7, 1913.

Application filed June 7, 1913. Serial No. 772,414.

To all whom it may concern:

Be it known that I, MARKUS L. SPIRA, a subject of the King of Hungary, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Paint-Removing Devices; and I hereby 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 pertains to make and use the same.

This invention relates to improvements in paint-removing devices, and pertains more especially to a paint-removing device employed in removing paint from wood or metal.

The primary object of this invention is to produce a device whereby burned paint can be removed from a painted surface before the burned and consequently blistered or softened and loosened paint has had a chance to harden.

Another object is to provide a paint-removing device of the character indicated which can be manufactured with facility at little cost.

With these objects in view, and to the end of attaining any other advantage hereinafter appearing, this invention consists in certain features of construction, and combinations and arrangement of parts, hereinafter described, pointed out in the claims, and illustrated in the accompanying drawings.

In said drawings, Figure 1 is a top plan of a rail and shows my improved paint-removing device in position for removing paint from one side surface of said rail. Fig. 2 is a section on line 2—2, Fig. 1, looking in the direction indicated by the arrow, but the rail illustrated in Fig. 1 is omitted in Fig. 2. Fig. 3 is a central section of my improved paint-removing device and shows the latter in the position shown in Fig. 1. Fig. 4 is a transverse section on line 4—4, Fig. 3, looking forwardly.

My improved paint-removing device comprises a metal blade A for scraping the blistered or burned and softened or loosened paint from a painted surface. Said blade is adapted to extend transversely of the surface to be scraped, and in Fig. 1 is shown in position for scraping paint from one side of the rail C. Fig. 1 shows my improved paint-removing device to be moved in the direction indicated by the arrow 6 to scrape paint from said rail. The blade A is provided with two forwardly projecting arms *a* which, as shown in Fig. 4, are arranged at opposite ends respectively of the blade. Said arms are therefore spaced longitudinally of the blade A and are also spaced from the scraping edge 7 of the blade. Said arms are connected together by a metal plate B. The blade A and the plate B are therefore connected together, and said plate is adapted to engage with the head D of a paint-burning nozzle, and said nozzle and said plate are removably secured together as will hereinafter appear. The plate B and the connected blade A are preferably composed of a single metal piece. The arms *a* are preferably arranged at an obtuse angle to the blade A, and the plate B is arranged substantially at a right angle to and extends rearwardly from said arms. In the position of the paint-removing device shown in Fig. 1 to remove paint from a side of a rail there is no liability, of course, of scraped-off paint accumulating in front of the blade A because the scraped-off paint will fall from the rail, nor is there any liability of the accumulation of scraped-off paint in front of the blade in scraping off paint by a downward movement on the painted surface, but in scraping paint on an upward movement of the paint-removing device the spacing of the arms *a* will be found not unimportant to permit escape of the scraped-off paint between said arms and thereby prevent any undue accumulation of scraped-off paint between the blade A and the forward end of the paint-burning nozzle.

The nozzle-head D forms the forward portion of the nozzle and projects forwardly beyond the forward end of the plate B. Said head D has an interior chamber 8. Said head is provided at its forward end with a front edge 10 extending widthwise of the head and longitudinally of the blade A. It will be observed that said edge 10 is arranged forward of and spaced from the blade A. Said edge has orifices 12 which are spaced longitudinally of said edge and form the outlets of the chamber 8. Obviously said edge forms the forward or discharging end of the nozzle. I would here remark that the nozzle and the blade A are so relatively arranged that when the scraping edge 7 of said blade is in contact with the painted surface to be scraped the front edge 10 or forward end of the nozzle is spaced from said surface in the operative

position of the blade shown in Fig. 1. The head D of the nozzle is widest at its front edge 10 or forward end and gradually reduced in width toward its rear end. Said nozzle has a tubular neck *d* which projects rearwardly from the rear end of the head D and is arranged centrally widthwise of said head. The neck *d* is in communication with the chamber 8 and is employed in conducting the fluid fuel, such, for instance, as gas or gasolene, to said chamber. Said neck is shown screw-threaded internally of its outer end, as at 13, and adapted to be connected in any approved manner to the body (not shown) of a hand-torch or attached to a flexible tube (not shown) leading from a pipe for supplying fluid fuel.

By the arrangement of the parts hereinbefore described it will be observed that the plate B extends widthwise of the head D and has its side edges 14 (see Fig. 2) converging rearwardly. The paint-burning nozzle and the plate B are parallel, and said plate is provided at the rear end of the head D with a rearwardly projecting arm *b* arranged longitudinally of and engaging the neck *d* of the nozzle. Said neck is provided with any suitable number of apertures *d'* which form the air-inlets of the nozzle. Said neck is preferably substantially circular in cross-section, and the arm *b* is curved transversely to conform to said neck. The arm *b* is provided centrally between its side edges with a slot 15 extending longitudinally of the arm and has two flanges 16 arranged at opposite sides respectively of and extending longitudinally of said slot and overlapping opposite side walls respectively of a recess 17 formed in and extending longitudinally of the neck *d* of the nozzle. It will be observed therefore that the paint-burning nozzle is adjustable longitudinally of the arm *d*,—or, in other words, the blade A is adjustable longitudinally of the nozzle,—and that the projection of the flanges 16 of the neck *d* of said nozzle and the side walls of the recess 17 prevent displacement of said arm circumferentially of said neck without interfering with the adjustability of said arm endwise of said neck. As shown in Fig. 2, the flanges 16 are spaced at their ends from the ends of the recess 17, and said recess therefore is long enough to accommodate any desired relative readjustment of the nozzle and the connected blade A. By the construction hereinbefore described it will be observed that the plate B and its arm *b* constitute a nozzle-engaging member arranged exteriorly of the nozzle and extending opposite said recess; that said nozzle-engaging member is connected to the blade A; that said blade is arranged to scrape the burned paint from a painted surface operated on by the flames issuing from the orifices 12 of the nozzle during the operation of my improved paint-removing device; that the nozzle is provided a suitable distance rearwardly of its forward end and exteriorly with the recess 17 extending longitudinally of the nozzle; that the aforesaid nozzle-engaging member has its slot 15 in registry with the aforesaid recess, and that said nozzle-engaging member and the nozzle are secured in the desired relative adjustment by a suitably applied bolt E and nut G.

As shown in Figs. 3 and 4 the shank of the bolt E extends through the nozzle-neck *d* and through the slot 15 and has its free end arranged adjacent said slot, and the nut G is screwed onto said shank and against the arm *b* externally of said slot, and the bolt has a head *e* formed thereon at the opposite end of said shank and overlapping the exterior of the aforesaid neck.

What I claim is:—

1. In a paint-removing device, the combination, with a blade for scraping paint from a painted surface, and a paint-burning nozzle, of a member engaging and secured to the nozzle and connected to the aforesaid blade, the nozzle having a front edge extending longitudinally of the blade, said front edge forming the forward end of the nozzle and arranged forward of and spaced from the blade, and the nozzle and the blade being so relatively arranged that when the scraping edge of the plate is in contact with the surface to be scraped the aforesaid edge of the nozzle is spaced from said surface in the operative position of the blade.

2. In a paint-removing device, the combination, with a blade for scraping paint from a painted surface, and a paint-burning nozzle having a head forming the forward portion of the nozzle, said nozzle also having a neck which projects rearwardly from said head, of a plate extending widthwise of said head and being connected to the aforesaid blade and provided at the rear end of said head with a rearwardly projecting arm arranged longitudinally of and secured to the aforesaid neck.

3. In a paint-removing device, the combination, with a blade for scraping paint from a painted surface, and a paint-burning nozzle having a head forming the forward portion of the nozzle, said nozzle also having a neck which projects rearwardly from said head, of a plate extending widthwise of and engaging said head and being parallel with the nozzle, said plate being connected to the aforesaid blade and provided at the rear end of said head with a rearwardly projecting arm arranged longitudinally of and secured to the aforesaid neck.

4. In a paint-removing device, the combination, with a blade for scraping paint from a painted surface, and a paint-burning nozzle having a head forming the forward portion of the nozzle, said nozzle also having a

neck which projects rearwardly from said head, of a plate extending widthwise of and engaging said head and being connected to the aforesaid blade and provided at the rear end of said head with a rearwardly projecting arm arranged longitudinally of and engaged by the aforesaid neck, said arm and said neck being relatively adjustable longitudinally, and means for securing said neck and said arm in the desired adjustment.

5. In a paint-removing device, the combination, with a blade for scraping paint from a painted surface, and a paint-burning nozzle having a head forming the forward portion of the nozzle, which head is widest at the forward extremity of the nozzle and gradually reduced in width toward the rear end of the head, said nozzle also having a neck which projects rearwardly from the head and is arranged centrally widthwise of the head, of a plate extending widthwise of and engaging said head and having its side edges converging rearwardly, said plate being connected to the aforesaid blade and provided at the rear end of said head with a rearwardly projecting arm arranged longitudinally of and secured to the aforesaid neck.

6. In a paint-removing device, the combination, with a blade for scraping paint from a painted surface, and a paint-burning nozzle which is provided exteriorly and rearwardly of its forward end with a recess extending longitudinally of the nozzle, of a member engaging the nozzle and extending opposite said recess and connected to the aforesaid blade and provided with a slot which is arranged in registry with said recess and extends longitudinally of the nozzle, said nozzle-engaging member having flanges overlapping the side walls of said recess, and means removably securing said nozzle-engaging member and the nozzle together.

In testimony whereof, I sign the foregoing specification, in the presence of two witnesses.

MARKUS L. SPIRA.

Witnesses:
B. C. BROWN,
N. L. MCDAMELL.