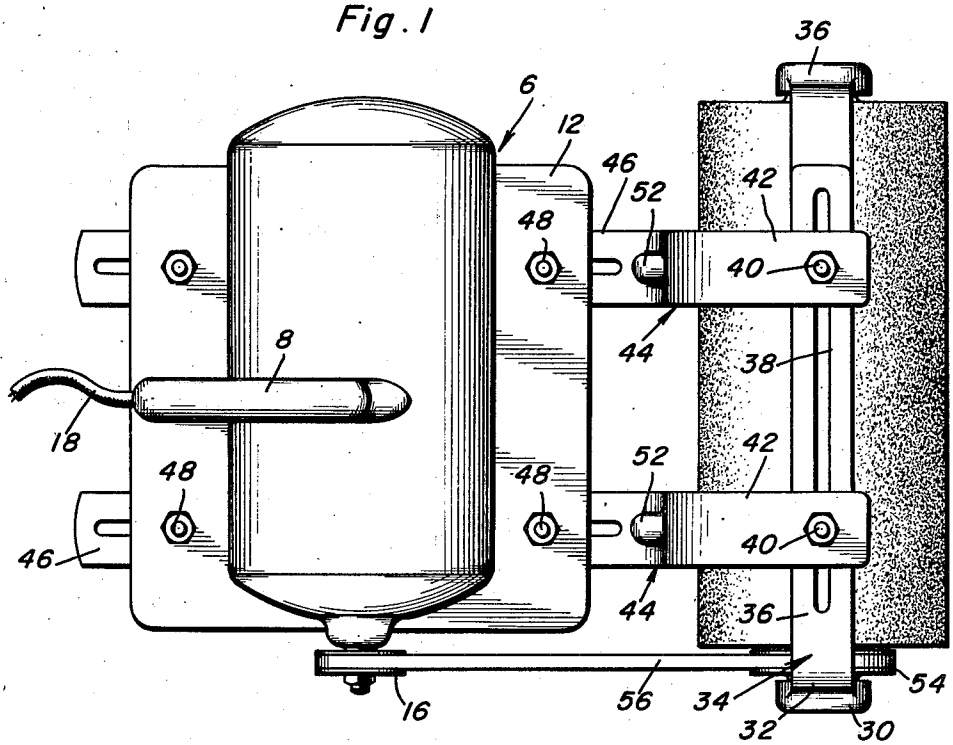
Nov. 12, 1957 R. E. PAYNE 2,812,529

LOOSE PAINT REMOVING BRUSH

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Fig. 1



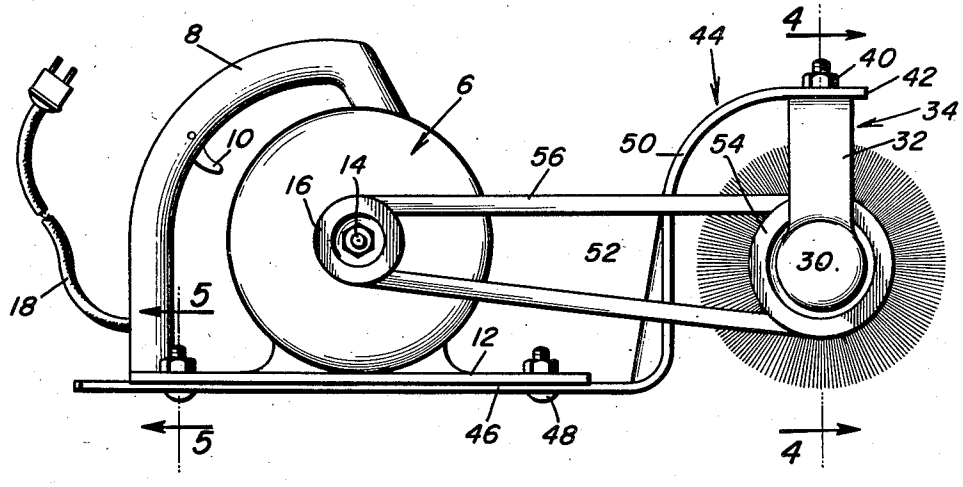


Fig. 2

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Fig. 3

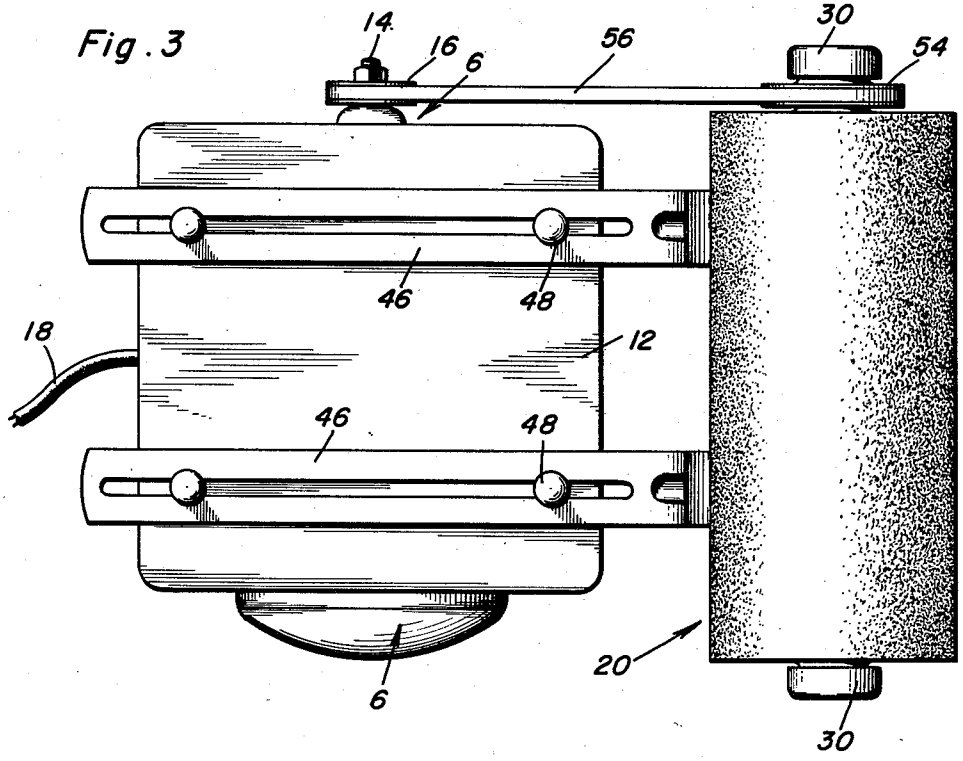
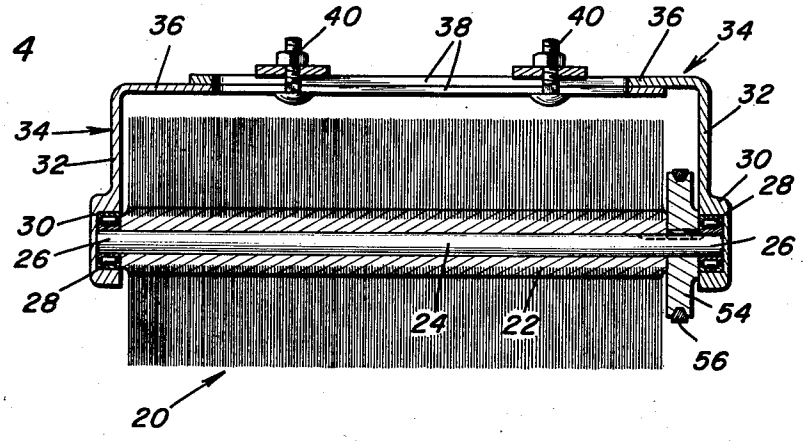


Fig. 4



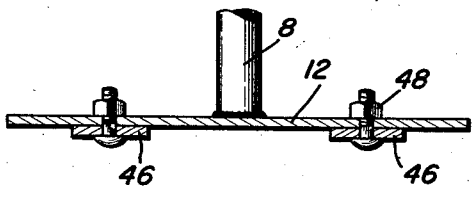


Fig. 5

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2,812,529

Patented Nov. 12, 1957

2,812,529

LOOSE PAINT REMOVING BRUSH

Richard E. Payne, San Bernardino, Calif., assignor, by direct and mesne assignments, of fifty percent to M. L. O'Harra and Edna M. O'Harra, Barstow, Calif., and fifty percent to Richard E. Payne and Mildred A. Payne

Application July 9, 1956, Serial No. 596,637

2 Claims. (Cl. 15—23)

The present invention relates to a portable motorized rotary wire or an equivalent heavy-duty brush which, when properly handled, will enable one to loosen and remove scale, rust, loose coating materials and matter and, more especially, for buffing and preparing a surface for painting by removing loose paint.

Briefly summarized, the invention is characterized by a handle-equipped circular saw-type electric motor having a base and switch and cord means, a sectional yoke with bearings to accommodate an attachable and detachable wire rotary brush, a suitable operating connection between the motor and brush, and adapter brackets whereby the yoke may be bracketed to the base on the motor to thus provide a simple, practical and economical assemblage of parts.

An objective of the over-all concept, construed somewhat generally, is to improve upon and reduce the number of parts entering into the combination, thereby not only increasing the efficiency of the implement or device as a whole, but also rendering the same less costly to manufacture and to otherwise simplify factors of assembling, sale, repairs, and so on.

Another similar objective is to provide a structural adaptation in which manufacturers will find their manufacturing requirements, assembling and replacement problems and economies met and painters, workmen and other users will find their surface reconditioning problems both carefully worked out and adequately solved.

Other objects, features and advantages will become more readily apparent from the following description and the accompanying sheets of official illustrative, but not necessarily restrictive, drawings.

In the drawings, wherein like numerals are employed to designate like parts throughout the views:

Fig. 1 is a top plan view of a motorized portable scale loosening and removing brush constructed in accordance with the principles of the present invention;

Fig. 2 is a side or edge elevation of the same;

Fig. 3 is a bottom plan view;

Fig. 4 is a section on the vertical line 4—4 of Fig. 2; and,

Fig. 5 is a similar but fragmentary section taken on the vertical line 5—5 of Fig. 2.

Referring now to the drawings, the electric motor is denoted by the numeral 6 and it is an encased type which is ordinarily provided with a handle 8 and suitable trip-switch 10 and is mounted on a flat plate or base 12 and used to operate a circular saw (not shown). Usually, the saw blade is mounted on the motor driven shaft 14 but in the instant situation the saw is replaced by a suitably grooved pulley 16. Incidentally, the current conducting cord is denoted by the numeral 18.

The wire brush for scale removing and other purposes is denoted generally by the numeral 20 and has a suitable hub 22 with a shaft 24 keyed therein and with shaft ends providing journals or trunnions 26. These project beyond the ends of the hub and they are mounted in suitable ball races 28 confined in cup-like bearings

or housings 30. The housings are mounted on the short arms 32 of the L-shaped sections 34 of the knock-down or sectional yoke. The long arms 36 are linearly straight and flat and superimposed on each other and are provided with elongate registering slots 38 to accommodate the bolt and nut assemblies 40.

The same bolt and nut assemblies 40 which join the overlapped slotted limbs or arms 36 together also serve to connect the laterally directed or terminal ends 42 of the adapter brackets to the sectional yoke. The adapter brackets are in a spaced parallel pair and these are denoted by the numerals 44. Each adapter bracket has a long arm 46 underlying the aforementioned base plate and bolted thereto as at 48. In addition, there is a vertical arm portion 50 suitably reinforced at 52 and, as before stated, the terminal end portions 42 overlap and are bolted to the slotted limbs 36 as perhaps seen best in Figs. 1, 2 and 4. By way of these slotted and adjustable brackets the motorized handle-equipped base and plate as a unit may be adjusted toward and from the brush or, conversely, the brush may be adjusted toward and from the motorized base by way of the special connecting brackets 44. The sectional yoke may be disconnected from the bolted end portions 42 and dismantled to permit the exchange of wire brushes. The brush is driven obviously by way of the pulleys 16 and 54 which are, in turn, operated by the connecting belt 56 which is trained over the pulleys.

Novelty is predicated on the base, motor, handle means and pulley as an entity, the sectional yoke and insertable and removable rotary wire brush as an entity, and the special brackets 44 which connect the brush and motor units or entities together in operative relationship and especially on the bolt devices 40 which provide a common connection between the bracket terminals 42 and the sections 34 of the yoke.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. In a portable loose paint and scale removing brush construction, a base plate, a handle-equipped motor mounted on said base plate and provided with a driven shaft equipped with a pulley, a substantially U-shaped yoke separate from and in spaced parallelism with one edge portion of said base plate, a rotary wire brush having shaft means with journals mounted for rotation in bearings provided therefor on said yoke and including a pulley, a belt trained over said pulleys whereby the motor shaft turns the brush, and brackets connecting said yoke with said base plate, said brackets having arm portions underlying and adjustably bolted to said base plate, having vertical arm portions interposed between the base plate and brush and terminal portions bolted to cooperating portions of said yoke.

2. For use on and in conjunction with a handle-equipped electric motor which is mounted on a flat bottomed base plate and is provided with a driven shaft, a substantially U-shaped yoke comprising a pair of L-shaped sections having long and short arms, said long arms being slotted and bolted together in superimposed extensible and retractible relationship, the short arms of said sections having bearings therein, a rotary wire brush having shaft means at its ends with journals and said journals being journaled for rotation in the bearings provided therefor in said short arms, a pair of brackets independent of said yoke, said brackets being disposed

in spaced parallelism and having coplanar arm portions which are adapted to underlie and which are intended to be adjustably bolted to the underneath side of the base plate, said brackets also having vertical arm portions which are designed to assume positions interposed between the leading edge of the base plate and the trailing side of said brush, and said arm portions having horizontal terminal portions which are separably and adjustably bolted to the slotted arms of the L-shaped sections of said yoke.

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