

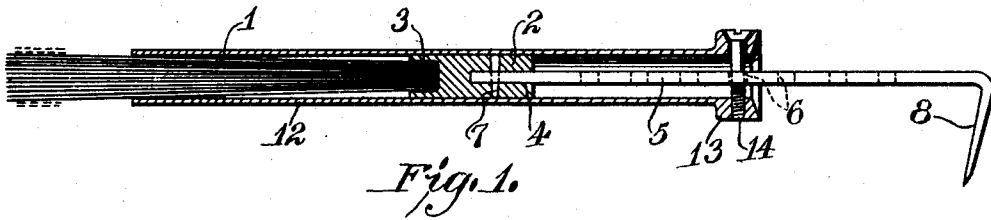
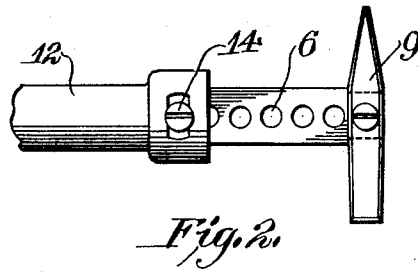
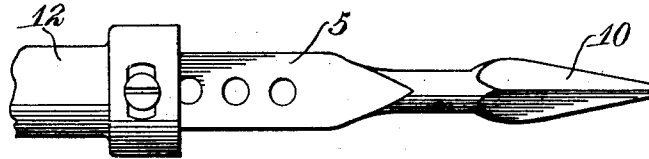
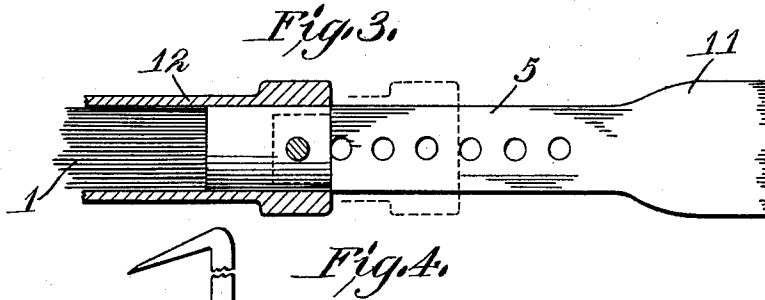
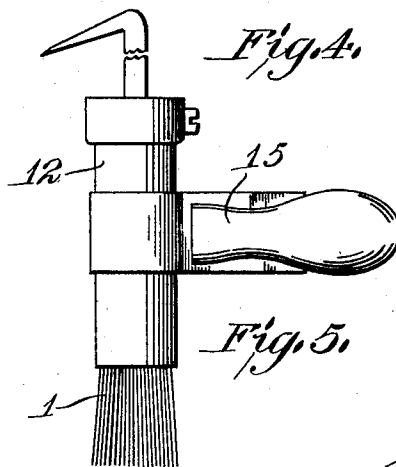
Sept. 23, 1930.

B. MARTIN

1,776,443

COMBINATION IMPLEMENT

Filed Sept. 13, 1929



INVENTOR
BRUNO MARTIN
BY *George B. Willcox*
ATTORNEY

UNITED STATES PATENT OFFICE

BRUNO MARTIN, OF SAGINAW, MICHIGAN

COMBINATION IMPLEMENT

Application filed September 13, 1929. Serial No. 392,417.

This invention is a combination instrument consisting of a wire brush and a scraper, a hammer head, bit or other desired tool whose shank comprises a handle for the brush, and a tubular sheath or sleeve slidable with respect to the brush and the tool shank.

The objects of the invention are to provide a wire brush with an adjustable sheath surrounding the bunch of wires, the sheath being adjustable so as to permit a greater or less length of wire to be exposed and thus present to the work a stiffer or more flexible brushing end as the nature of the work may require.

Another object is to provide a means for attaching the sheath to the tool shank at any point along its length so that a longer or shorter length of the shank may be made to project beyond the end of the sheath and provide more or less flexibility to the tool shank, especially when the tool is in the form of a scraper.

A further object is to provide a simple combination brush and tool that can be manufactured at small expense and is usable for various purposes, such as cleaning or smoothing articles of wood or iron, or for scraping them.

With the foregoing and certain other objects in view, which will appear later in the specification, the invention comprises the devices described and claimed and the equivalents thereof.

In the drawings Fig. 1 is a longitudinal sectional view of a preferred embodiment of the invention.

Fig. 2 is a side view of one end of the device employing the tool in the form of a hammer head.

Fig. 3 is a similar view, the end of the tool being in the form of a bit to be inserted in a brace for rotating the brush.

Fig. 4 is a part sectional view of a device in the form of a chisel or flat bladed scraper.

Fig. 5 is a still further modified form employing a side handle for a brush.

As is clearly shown in the drawings the instrument may be made in various forms according to its intended use.

The brush consists of a quantity of some

flexible material, as wires 1, attached to a stock 2, one end of which is made in the form of a ferrule 3 in which an end of the brush material is fixed. The other end of the stock is formed with a transverse slit 4 to receive the end of a bar shank 5 formed with a longitudinal row of holes 6 spaced apart. The end of the shank is secured to the end of the stock by means of a pin 7 passing through the stock and the shank. The outer end of the shank may carry a hooked scraper 8, a hammer head 9, a bit 10, a flat scraper 11 or other form of tool commonly required to be used with a wire brush. A tubular sheath 12 envelops the stock 2 and the brush 1 and is slidable lengthwise thereof. An end of the sheath is provided with a transverse bolt 14 which may be passed through any one of the holes 6 in the shank 5, thereby fastening the sheath at any desired place along the length of the brush and shank. In this manner any desired amount of the brush may be exposed from the end of the sheath and various degrees of flexibility may be imparted to the scraper by allowing more or less of the scraper shank to project beyond the sheath, as indicated in Figs. 1 and 4.

If the brush is to be used for brushing away material at the bottom of a hole bored part way through a piece of metal the sheath is adjusted to the position indicated by the dotted lines in Fig. 1 and a bit is inserted in the brace to rotate the brush. If desired a side handle 15 may be clamped to the sheath as shown in Fig. 5.

By the means above described I have produced a combination instrument that is simple and inexpensive in construction, durable and adapted to impart greater or less rigidity to the exposed end of the brush or to the shank of the tool as required.

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

In combination a brush comprising a bunch of bristles fixed to a stock having a slit in an end thereof, a bar shank removably received in said slit and formed with spaced holes, a tool on the end of said shank,

a tubular sheath enclosing said brush, stock and shank and slidable lengthwise thereon, a bolt extending transversely through said sleeve near an end thereof and through any
5 one of the holes in the shank, whereby varying degrees of flexibility are permitted to the free end of the shank and various lengths of the brush are exposed beyond the end of the sheath.

10 In testimony whereof, I affix my signature.

BRUNO MARTIN.

15

20

25

30

35

40

45

50

55

60

65