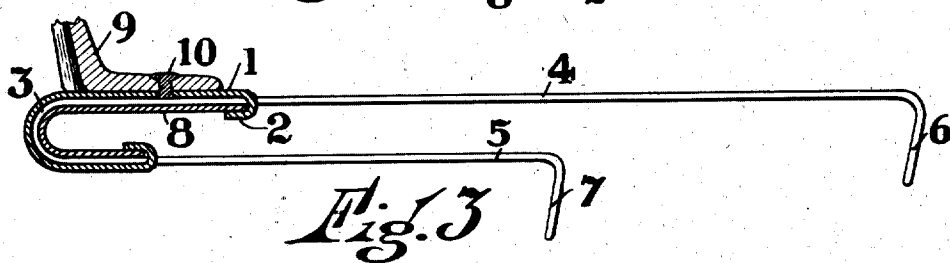
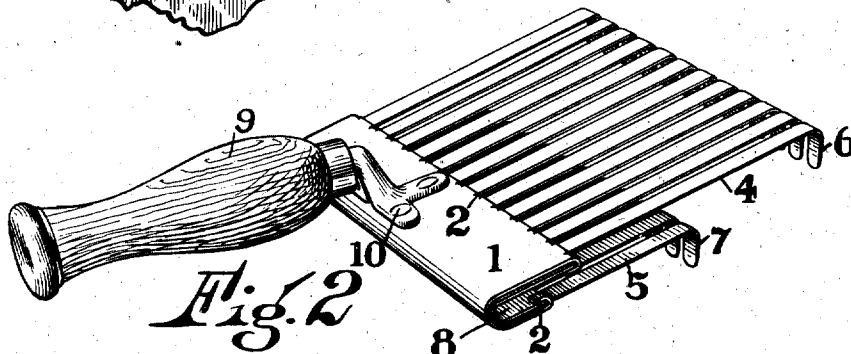
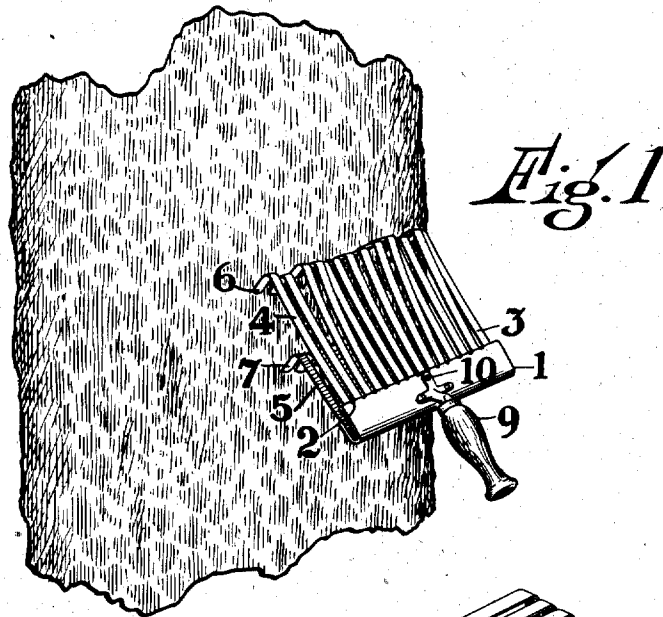


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CLEANING IMPLEMENT.
APPLICATION FILED MAY 9, 1910.

1,008,382.

Patented Nov. 14, 1911.



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CLEANING IMPLEMENT.

1,008,382.

Specification of Letters Patent. Patented Nov. 14, 1911.

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To all whom it may concern:

Be it known that I, JOSEPH S. SOUREK, a citizen of the United States, residing at Bath township, in the county of Summit and State of Ohio, have invented new and useful Improvements in Cleaning Implements, of which the following is a specification.

This invention relates to cleaning implements especially designed for cleaning the bark of trees and the object thereof is to provide a suitable implement by which scale and other injurious matter may easily be removed from the bark of a tree, the device being constructed of such width as to cover a relatively large area of the bark of a tree at each application to reduce the time required for the treatment thereof, as well as to make the same more efficacious.

The invention contemplates providing a suitable tool having a plurality of resilient fingers the inner ends of which are carried by a body portion provided with a handle or socket and with the opposite ends thereof bent to constitute scraping blades, the outer ends of which are independently-movable, so that when the tool is applied to an irregularly-formed surface, such as the bark of a tree, the scraping blades at the ends of the fingers will adapt themselves and conform to the various irregularities of the surface over which they are passed to cause them to resiliently and yieldably engage the same to effectually clean all portions over which the tool is passed.

The invention further contemplates the use of the device, or slight modifications thereof for scaling fish, dressing stone, butchers' blocks, currying horses, etc., so that the implement or slight modifications thereof is capable of being employed for performing a variety of operations wherein it is necessary to use a cleaning or scraping tool upon an irregular surface on which an inflexible or unyielding scraping tool cannot be advantageously employed.

With the foregoing and other objects in view, the invention consists in the novel construction, combination and arrangement of

parts constituting the invention to be hereinafter specifically described and illustrated in the accompanying drawings which form a part hereof wherein is shown the preferred embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claims hereunto appended.

In the drawings, in which similar reference numerals indicate like parts in the different figures: Figure 1 is a perspective view of my improved device showing the same in use under service conditions. Fig. 2 is a perspective view of the device shown in Fig. 1, enlarged; and, Fig. 3 is a view in central, longitudinal section of the device shown in Fig. 2.

Referring to the drawings in detail in which is shown a preferred type of this invention, the reference numeral 1 denotes a transversely-extending approximately U-shaped bar constituting the body portion of the device and provided at the lateral edges thereof with a series of forwardly-projecting spaced lugs 2. Seated in the groove or channel formed by the sides of the body portion 1 are a plurality of flat strips of flexible material bent substantially U-shaped to provide an upper and a lower set of independently yieldable fingers 4, 5 respectively. The fingers of each set are arranged in parallel planes and the fingers of one set extend in parallelism with respect to the fingers of the other set. The fingers of the set 4 are of greater length than the fingers of the set 5. The bend 3 of each of the strips is secured to the inner face of the member 1. The fingers of the set 4, as well as the fingers of the set 5, are spaced from each other through the medium of the lugs 2. The outer end of each of the fingers of the set 4, as well as the outer end of each of the fingers of the set 5, is bent inwardly at right angles to form a scraping blade, the blades at the outer end of the fingers of the set 4 are indicated by the reference character 6 and the blades of the fingers of the set 5 are indicated by the reference character 7.

The blades 6 are arranged in parallelism with respect to each other and a like arrangement is had in connection with the blades 7.

5 After the bends or curved ends of the strips have been seated in the groove or channel in the member 1 a U-shaped clamping member 8 is inserted in the groove and seated on the inner faces of the strips. The
10 side walls of the U-shaped clamping member 8 approximately conform to the inner faces of the curved portions of the strips and are usually somewhat narrower than the side walls of the member 1. After the
15 clamping member 8 has been seated, the lugs 2 are bent and clenched over the outer edges of the sides of the member 8 for locking it in position, in doing which the lugs 2 are passed between the strips and serve to constitute spacing members for holding the
20 latter in spaced relation with respect to each other, and at the same time the clenching or bending of the lugs 2 over the edges of the clamping member 8 serves to simultaneously and fixedly lock all of the strips against
25 movement, thereby providing the body portion with one or more series of projecting fingers all composed of resilient and yieldable material with their ends terminating in
30 inwardly extending, resilient, independently-movable scraping blades.

In practice, I preferably provide the body portion 1 with a convenient handle 9, shown in the drawings secured to the member 1
35 through the medium of holdfast devices 10, but it will be obvious that instead of the form of handle shown any other may be employed or a socket may be used to receive the end of a pole when the device is
40 to be used on the upper portions of a tree.

While I have shown and described one specific means for mounting a pair of series of resilient spring fingers terminating in
45 scraping blades to provide a flexible scraper, it will be obvious of course that these fingers may be mounted and formed in a variety of ways and hence I do not confine myself to the exact details of construction or limit myself to the manner of holding the inner
50 ends of the resilient fingers.

I claim:

1. The combination in a device of the class described, of a body portion provided with a U-shaped groove or channel the sides
55 of which are provided at their edges with a plurality of laterally-extending spaced lugs, a plurality of independently-yieldable resilient fingers, one end of each of which is mounted in said groove or channel, a
60 common clamping device for simultaneously holding the ends of said fingers in said groove and retained in position by the clenching of said lugs thereon, said lugs constituting means for holding said fingers in

spaced relation, the outer end of each of said 65 fingers fashioned to constitute an independently-yieldable and resiliently-supported scraping blade.

2. The combination in a device of the class described, of a body portion provided with 70 a groove constituting a seat, a plurality of U-shaped fingers having the bent portions thereof mounted in said seat and with the extended portions of said fingers fashioned to constitute independently-yieldable and 75 resiliently-supported scraping blades and a clamping device for simultaneously-holding the curved portions of said fingers in said seat, substantially as described.

3. A cleaning implement comprising a 80 body portion, and two sets of independently-yieldable resilient fingers extending therefrom, the fingers of one set arranged below and parallel with the fingers of the other set, each of the fingers of each set having the 85 ends thereof fashioned to constitute independently-yieldable scraping blades, the blades of the lower set depending below the blades of the upper set.

4. A cleaning implement comprising a 90 body portion, and two sets of independently-yieldable resilient fingers extending therefrom, each of the fingers of each set having the ends thereof fashioned to constitute an independently-yieldable scraping blade, the 95 fingers of one set arranged below and extending in parallelism with respect to the fingers of the other set.

5. A cleaning implement comprising a plurality of flexible strips bent to provide 100 two sets of independently-yieldable resilient fingers, each of the fingers of each set having its free end bent inwardly at right angles to provide a scraping blade, the fingers of each set arranged in parallel planes with 105 respect to each other, the blades of the fingers of each set arranged in parallel planes with respect to each other, and means for maintaining the fingers of each set in spaced relation with respect to each other. 110

6. A cleaning implement comprising a plurality of flexible strips bent to provide two sets of independently-yieldable resilient fingers, each of the fingers of each set having 115 its free end bent inwardly at right angles to provide a scraping blade, the fingers of each set arranged in parallel planes with respect to each other, the blades of the fingers of each set arranged in parallel planes with respect to each other, and means for 120 maintaining the fingers of each set in spaced relation with respect to each other, the fingers of one set arranged below and in parallelism with the fingers of the other set.

7. A cleaning implement comprising a 125 pair of blades united at one end and with their free ends arranged to lie in a vertical plane one above the other, the termini of

said free ends thereof abruptly bent at angles with the ends causing the faces of the bent portions to lie in the same general direction as said plane, said bent portions arranged to constitute independently adaptable and yieldable scraping blades.

In testimony whereof I have hereunto set

my hand in presence of two subscribing witnesses.

JOSEPH S. SOUREK.

Witnesses:

C. E. HUMPHREY,
GLENARA FOX.