United States Patent [19]

Siemund

[11] **3,783,469**

[45] **Jan. 8, 1974**

[54] **COMBINATION WINDOW WASHER, SCRAPER AND SQUEEGEE**

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[21] Appl. No.: **264,612**

[52] **U.S. Cl.** ..... **15/209 R,** 15/121, 15/220 R, 15/224, 15/244 R

[51] **Int. Cl.** **A47l 1/08**

[58] **Field of Search** ..... 15/116 A, 119 A, 15/121, 151, 153, 199, 205, 209 AH, 210 R, 223, 224, 244 R, 244 A, 244 CH, 220 R; 407/23–25, 203, 204, 290

[56] **References Cited**

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Primary Examiner—Daniel Blum
Attorney—Richard J. Cowling

[57] **ABSTRACT**

A cleaning implement of a type including a frame structure, a manipulating handle attached to the absorbent member of a sponge or sponge like resilient material, the absorbent member being covered by a tight encompassing reticulated netting material and mounted on the frame structure by an improved comb-like mounting member or strip. The mounting strip having prongs projecting in spaced relation along the strip. The prongs being so arranged that upon the mounting strip being positioned in a longitudinally extending parallel relation to the absorbent member with the prongs being directed into the absorbent member. The longitudinally extending strip may be thereupon forced into the resilient material of the absorbent member and covering netting material so as to form a pair of juxtaposed roll shaped portions of the absorbent member with the prongs of the mounting strip passing through a portion of the resilient material of the absorbent member intermediate the pair of roll shaped portions thereof. The prongs of the mounting strip thus projecting through the intermediate portion of the absorbent member are in turn positioned in a channel defined by opposite plate portions of the frame structure and secured therein so as to in turn fasten the mounting strip to the frame structure, thereby effectively mount the pair of roll shaped portions of the absorbent member covered by the encompassing reticulated netting material on the frame structure.

8 Claims, 3 Drawing Figures

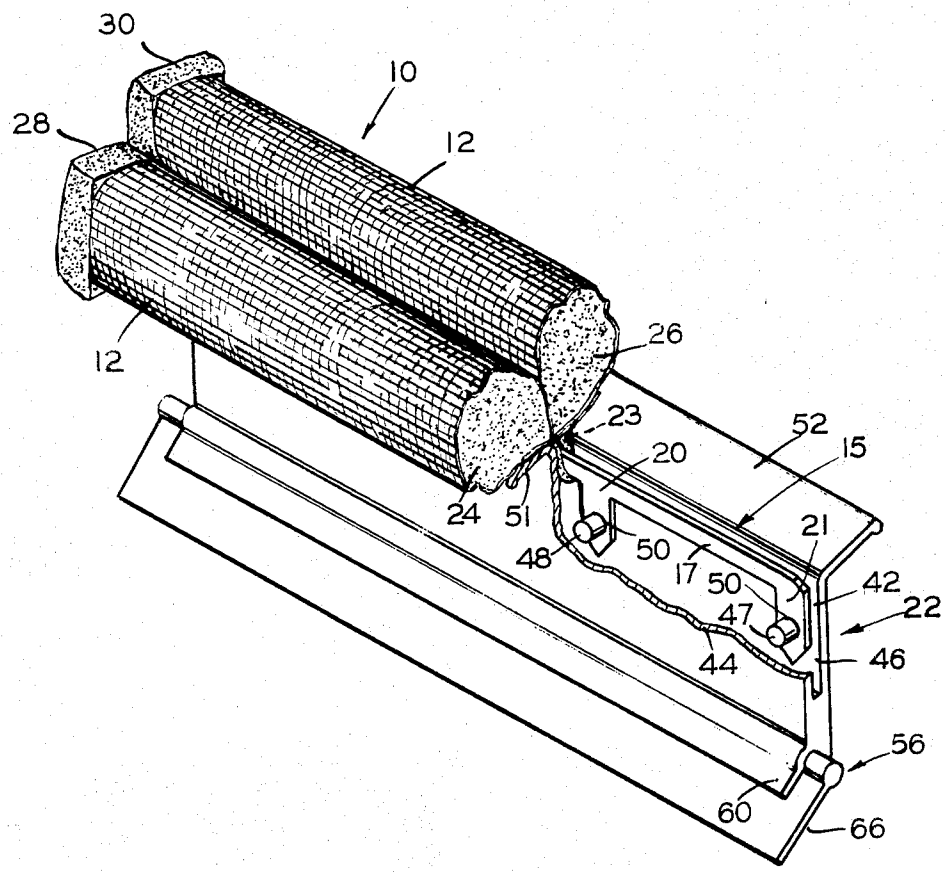
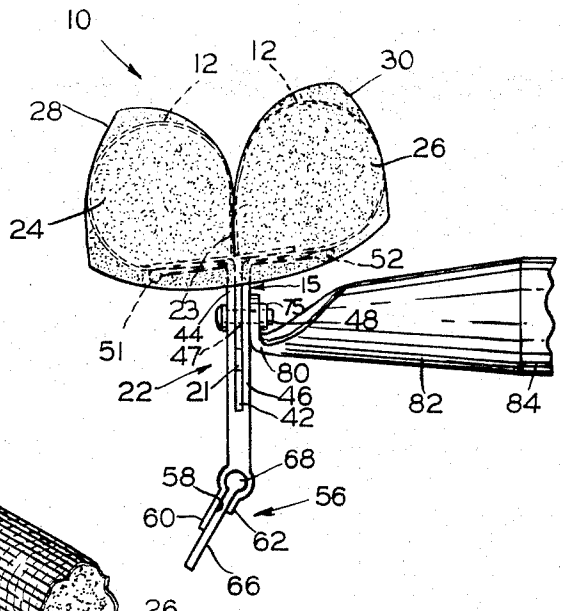


FIG. 2



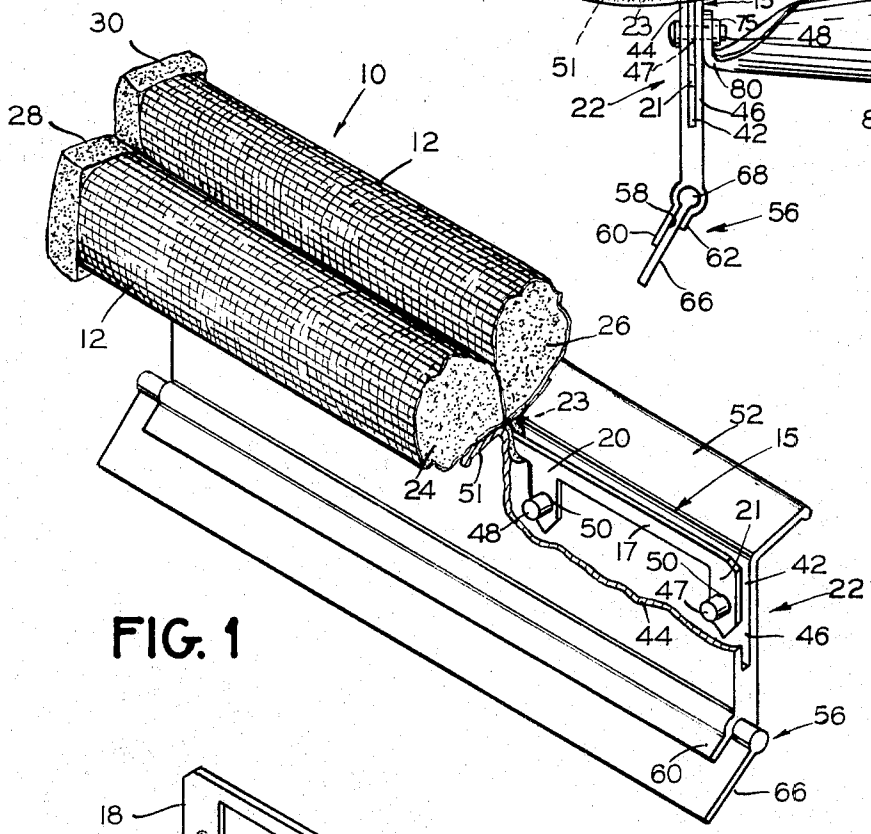


FIG. 1

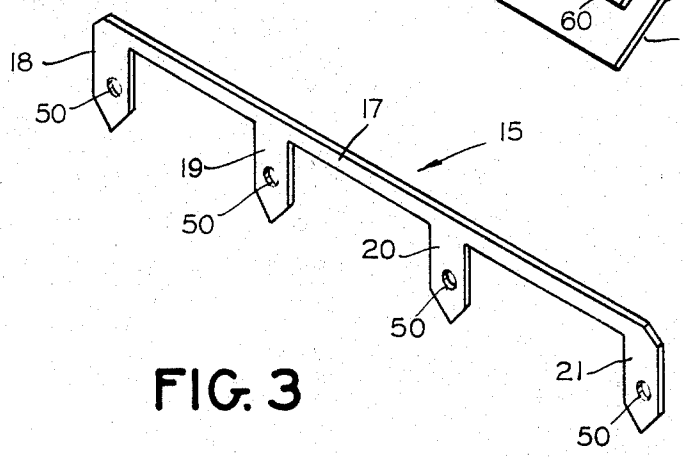


FIG. 3

COMBINATION WINDOW WASHER, SCRAPER AND SQUEEGEE

CROSS REFERENCE TO RELATED PATENT

The present application is directed to an improvement in the combination window washer, scraper and squeegee disclosed in U. S. Pat. No. 3,406,420, granted Oct. 22, 1968, to Herbert A. Siemund, the inventor of the subject matter of the improvement disclosed and claimed herein.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to a cleaning implement and has particular relation to a combination washer, scraper and squeegee of a type including a pair of spaced roll shaped sponge-like blades or portions of an absorbent member provided with a tight fitting mesh or netting material, and more particularly to an improved means for forming and mounting the pair of spaced roll shaped sponge-like blades on the cleaning implement.

2. Description of the Prior Art

Heretofore, as disclosed in the aforenoted U. S. Pat. No. 3,406,420, granted to the inventor of the subject matter of the present invention, there has been provided a cleaning implement of a type including a pair of juxtaposed roll shaped sponge-like portions having a covering of a netting material.

However, in such prior patent, the formation of the roll shaped sponge-like portions has necessitated a complex and tedious sewing and stitching of the sponge. Thus, in the aforementioned patent, it is explained with reference to FIG. **2** thereof, that after the rectangular sponge **10** is covered with its netting material **12** and stitched, as indicated at **14,** the outwardly extending edge seams **16** and **18** are separable, and the sponge **10** with its netting cover material **12,** as best shown by FIG. **3,** are then stitched by a plurality of vertical stitches between said separable edge seams **16** and **18,** as indicated in dotted lines **20,** through its thickness dimensions and along its longitudinal axis.

Such stitching step, disclosed in the aforementioned patent, with its vertical stitches **20** draws in the opposite sides of the sponge **10** and netting material **12** along its longitudinal axis thereby forming a depression **22** in the compressible material and causing the laterally extending side portions thereof to form the pair of spaced netting covered roll shaped sponge portions **24** and **26.**

Furthermore, in the disclosure of the aforenoted patent, not only is the complex stitching necessary to form the roll shaped sponge portions **24** and **26,** but also the edge seams **16** and **18** provided thereby are necessary to mount the roll shaped sponge portions **24** and **26** on a supporting frame structure **40** of the cleaning implement, as shown by FIGS. **6** and **7** of the patent, in an arrangement in which the edge seams **16** and **18** are brought together and secured between an interlocking offset of the fastening plates **44** and **46** of the frame structure **40.**

In the present invention, the simple structure and cooperative arrangement of the comb-like mounting member or strip with the sponge and netting in the frame structure of the cleaning implement eliminates the former complex and tedious stitching and sewing of the sponge-like absorbent member and covering netting heretofore considered necessary to form the roll shaped sponge-like portions **24** and **26** and mouunting seams **16** and **18.**

Moreover, the simple idea of means of the present invention provides a better result in that the comb-like mounting strip in its interlocking relation with the sponge-like absorbent member and netting more surely secures the roll shaped sponge-like portions with their covering netting from breaking away from the frame structure of the cleaning implement in which the mounting strip is securely fastened than would be the case of the mounting seams **16** and **18** disclosed in the prior patent.

It should also be noted that such improved result effected by the present invention is reached with less expense in that it is effectuated by the elimination of these expenses incident to the labor costs required to provide the complex and tedious sewing and stitching of the sponge-like absorbent member in a manner such as disclosed in the aforenoted patent.

There is no suggestion in the prior patent of the simplified structure of the comb-like mounting strip of the present invention positioned in cooperative relation with the net covered absorbent member so as to form along a longitudinal axis of the absorbent member a depressed portion having a pair of roll shaped sponge-like portions juxtapositioned at opposite sides of the depressed portion with prongs of the comb-like strip, piercing the depressed portion of the net covered absorbent member, the prongs of the mounting strip being so arranged as to project through said depressed portion of the sponge-like absorbent member, and into a channel provided in the frame structure of the cleaning implement, including means to secure the prongs therein and thereby the mounting strip and the roll shaped sponge-like portions on the frame structure of the cleaning implement. The present invention is of that class of worthy and sustainable inventions, whereby adding a new idea and a new feature in assembling features in a given device an improved result is reached with less expense.

SUMMARY OF THE INVENTION

The present invention relates to a simplified means for forming a resilient sponge-like member into a pair of juxtapositioned roll shaped sponge-like blades while securely mounting the roll shaped sponge-like blades on the frame structure of a cleaning implement.

An object of the invention is to provide a cleaning implement of a type including a pair of spaced resilient roll shaped sponge-like portions having a covering material of a netting capable for use in removing firmly adhering dirt and the like from a surface to be cleaned; together with an improved comb-like mounting strip arranged in such a manner as to form the roll shaped portions from a sponge-like member while effectively mounting the roll shaped sponge-like portions in an operative relation on the cleaning implement.

Another object of the invention is to form a pair of juxtaposed roll shaped sponge-like portions of a substantially greater length than their cross-sectional dimension, said roll shaped portions being formed from a rectangular block of a sponge-like material, such as foam rubber, the length of said rectangular block having a substantially greater dimension than the width thereof and the width of said block having a substan-

tially greater dimension than the thickness of the block, a tight fitting mesh or netting is provided around the block of sponge-like material, said mesh or netting covered block having a portion thereof depressed along a longitudinal axis of said block of sponge-like material by a longitudinally extending mounting strip so as to form the pair of juxtaposed roll shaped sponge-like portions of the block, and the longitudinally extending mounting strip including prongs piercing the depressed portion along the longitudinal axis of the block, and means for securing portions of the prongs extending through the depressed portion of the block to a frame structure of the cleaning implement to mount the pair of juxtaposed roll shaped sponge-like portions on the implement.

Another object of the invention is to provide the frame structure of the aforenoted cleaning implement with a bifurcation at one end of the frame structure for receiving and securing a rubber squeegee therein and another bifurcation at the opposite end for receiving and securing portions of the prongs of the mounting strip extending through the depressed portion of the block of sponge-like material for securing the pair of roll shaped sponge-like portions of the block for use at said opposite ends of the frame structure, and the frame structure being provided with a manipulating handle, whereby the pair of juxtaposed roll shaped sponge-like portions mounted on the frame structure by said strip can be used one at a time during the cleaning operation while the sponge-like roll portion not being used provides an auxiliary reservoir of cleaning liquid should additional cleaning liquid be required in a cleaning and scraping operation.

Other and further objects and advantages of the invention reside in the detailed construction of the improved cleaning implement, which result in simplicity, economy and efficiency, and which will be apparent from the following description, wherein a preferred form of embodiment of the invention is shown. It is to be understood, however, that the drawings are for the purpose of illustration only and are not a definition of the limits of the invention, reference being had to the appended claims for this purpose.

DESCRIPTION OF THE DRAWINGS

In the drawings in which corresponding parts have been indicated by corresponding numerals:

FIG. 1 is a perspective view of the improved cleaning implement of the present invention, showing in section parts of a pair of roll shaped portions of a netting covered block or member of sponge-like absorbent material broken away so as to illustrrate the construction of an improved comb-like mounting strip and the structural arrangement of the mounting strip in assembled relation with the roll shaped sponge-like portions in which prongs projecting from the mounting strip are shown piercing a depressed portion of the sponge-like block extending along the longitudinal axis of the block, and means securing the prongs in the bifurcated end portion of the frame structure of the implement.

FIG. 2 is an end view of the cleaning implement of FIG. 1 in which there is shown the improved mounting strip positioned in assembled relation in the bifurcated end portion of the frame structure of the implement with one of the end prongs of the mounting strip secured in the bifurcated end portion of the frame structure by a suitable rivet or fastening bolt, as indicated by dash lines.

FIG. 3 is a side perspective view of the comb-like mounting strip of FIGS. 1 and 2, showing the prongs thereof projecting from a body portion of the mounting strip and arranged in spaced relation along the body portion of the mounting strip.

DESCRIPTION OF A PREFERRED EMBODIMENT OF THE INVENTION

Referring to the drawings and particularly FIGS. 1 and 2, there is provided a rectangular block or member, indicated generally by the numeral 10, of an absorbent sponge-like material having a substantially greater length dimension than the width dimension of the block, and a substantially greater width dimension than the thickness dimension thereof.

The block 10 may be of a natural sponge, expanded cellulosic material known as an artificial sponge, sponge rubber, foam rubber material or similar water absorbent compressible materials.

Encompassing the rectangular water absorbent sponge-like member or block 10 is a relatively stiff abrasive covering member of a synthetic fibre netting or screen, which is indicated in the drawing of FIG. 1 by the numeral 12. The relatively stiff abrasive covering member 12 may be of a reticulated plastic or wire of any suitable synthetic fibre, such as nylon, a polyester such as may be obtained under the Trademark "DACRON," or an acrylic such as may be obtained under the Trademark "ORLON," having regularly spaced and alternating strands and interstices. The netting 12 should be softer than the surface to be cleaned so as not to scratch such surface, while sufficiently abrasive in the presence of water to remove dried insect remains, dirt and the like from glass or highly painted surfaces which are to be cleaned.

The aforementioned provision of the netting 12 encompassing the rectangular sponge-like member or block 10 is generally similar to that provided in the aforenoted U. S. Pat. No. 3,406,420. However, instead of utilizing the complex and tedious sewing and stitching of the net covered sponge-like block required under the disclosure of the aforenoted patent in order to form the pair of juxtaposed roll shaped portions, the present invention eliminates such tedious and expensive sewing and stitching requirement through the provision of a simple means 15 functioning to form the pair of juxtaposed roll shaped portions. This simple means 15 may also serve an additional or double function of mounting the net covered sponge-like absorbent member or block 10 and pair of juxtaposed roll shaped portions thereof in an operative relation on a cleaning implement, as shown by FIGS. 1 and 2.

In the present invention, the improvement includes such simple means as a comb-like mounting strip 15, as best shown in FIG. 3, including a longitudinally extending body portion 17 from which project in spaced relation a plurality of prongs indicated by the numerals 18, 19, 20 and 21, and cooperatively arranged in relation to a supporting frame structure 22 of the cleaning implement upon assembly therein.

Thus, during assemblage of the mounting strip 15 into the supporting frame structure 22, as shown in FIGS. 1 and 2, a force is applied by the assembler to the body portion 17 of the mounting strip 15 which, in turn, causes the sponge-like block 10 to be depressed

at a central portion 23 thereof intermediate opposite side edges and along the longitudinal axis of the sponge-like block 10 to form the pair of juxtaposed roll shaped portions 24 and 26 thereof, as shown by FIGS. 1 and 2.

Moreover, upon the sponge-like block 10 being so depressed at the central portion 23 by the force applied thereto through the body portion 17 of the mounting strip 15, it should be noted that the prongs 18, 19, 20 and 21 projecting from the body portion 17 will pierce the depressed central portion 23 which extends along the longitudinal axis of the net covered sponge-like absorbent block or member 10.

Obviously, those portions of the prongs 18, 19, 20 and 21, extending through the net covered sponge-like absorbent block or member 10 at said depressed portion 23, may be effectively secured in the frame structure 22, as hereinafter explained.

It should be noted that the netting cover material 12 is slightly shorter in length than the sponge-like block 10 so that as the pair of juxtaposed roll shaped portions 24 and 26 of the sponge-like block 10 are formed by the force applied thereto by the assembler through the mounting strip 15 the roll shaped sponge-like portions 24 and 26 will expand at the ends above the netting material 12.

Such expansion of the roll shaped portions 24 and 26 at the ends thereof will, in turn, form beaded edges 28 and 30, as best shown in FIGS. 1 and 2, at opposite ends of each of the roll shaped sponge-like portions 24 and 26. These beaded finishing edges 28 and 30 serve as a protective edging to prevent the hands of an operator from coming into contact with the sharp irregular edges of the netting material 12 at the ends of the roll shaped portions 24 and 26.

The improved mounting strip 15, as will be explained hereinafter, further serves to mount the netting covered sponge-like block 10 and the roll shaped portions 24 and 26 thereof on the supporting frame structure 22 of the cleaning implement. The frame structure 22 includes a longitudinally extending channel or bifurcation 42 defined by a pair of fastening plates 44 and 46 formed integrally with the main frame structure 22. The frame structure 22 is so arranged that the body portion 17 of the mounting strip 15 and prongs 18, 19, 20 and 21 projecting therefrom and through the depressed portion 23 of the sponge-like block 10 are received in the bifurcation 42. The prongs 18, 19, 20 and 21 are secured in the bifurcation 42 by suitable fastening means, such as rivets and bolts 47 and 48, respectively, projecting through the fastening plates 44 and 46 and coinciding apertures 50 formed in the prongs 18, 19, 20 and 21, as best shown in FIGS. 1, 2 and 3.

In the foregoing arrangement, a rivet 47 is received in the aperture 50 of each prong 18 and 21 while a bolt 48 is received in the aperture 50 of each prong 19 and 20 to secure the strip 15 in the mounting relationship shown by FIGS. 1 and 2. It will be further noted that the fastening plates 44 and 46 have angularly and laterally extending plates 51 and 52, respectively, which in turn support the sponge-like block or absorbent member 10. Thus, upon the mounting strip 15 being in the assembled position, as shown by FIGS. 1 and 2, the body portion 17 thereof causes the portion 23 of the sponge-like block 10 to be depressed along the longitudinaly axis thereof while the laterally extending plates 51 and 52 provide backing plates for the sponge-like absorbent member or block 10 during the deformation thereof into the pair of juxtaposed longitudinally extending roll shaped sponge-like portions 24 and 26 by the compressive force applied through the body portion 17 to the resilient absorbent member or block 10. This compressive force is effectively applied by the assembler in the positioning of the mounting strip 15 into operative relationship in the supporting frame structure 22, being shown by FIGS. 1 and 2.

Furthermore, upon the assembly of the mounting strip 15 into the aforenoted operative relationship, the mounting strip 15 effectively secures the roll shaped sponge-like portions 24 and 26 with the encompassing reticulate netting 12 from breaking away from the bifurcation 42 in which the strip 15 is secured between the fastening plates 44 and 46, while the lateral plates 51 and 52, extending angularly from the fastening plates 44 and 46, respectively, in turn, provide suitable backing plates for the roll shaped sponge-like portions 24 and 26 during compression and deformation thereof in operative use in the scrubbing of a surface to be cleaned by the implement.

The opposite end of the supporting frame structure 22 has an angularly extending plate portion 56, which is bifurcated as at 58. The bifurcation 58 includes a pair of backing plates 60 and 62 between which there may be mounted a rubber scraper blade or squeegee 66, having a base portion 68. The scraper blade or squeegee 66 may be used in the conventional manner to clear or dry the surface to be cleaned of water or other cleaning liquid.

The bolts 48, one of which is shown by FIGS. 1 and 2, in addition to securing the prongs 19 and 20 in the bifurcation 42 and between the fastening plates 44 and 46 also secures by nuts 75, screw threadedly engaged on the bolts 48, an angular portion 80 of a looped metal, socket member 82 for receiving a handle 84, whereby the operator may manipulate the cleaning implement so as to clean a desired surface.

Although only one embodiment of the invention has been shown and described, it will be obvious to those skilled in the art that various changes in the form and relative arrangements of the parts may be made without departing from the scope thereof. Reference is therefore to be had to the appended claims for a definition of the limits of the invention.

What is claimed is:

1. In a cleaning implement of a type including a compressible water absorbent member, and said absorbent member having a longitudinal axis; a frame structure having a pair of plates extending laterally from opposite sides of the frame structure for supporting the absorbent member; and means for mounting the absorbent member on the laterally extending plates of the frame structure; the improvement comprising the mounting means including first means to compress the absorbent member and second means to pierce the absorbent member, and said mounting means being so effectively positioned in relation to said absorbent member as to cause the first means and the second means, respectively, to compress and pierce the absorbent member along said longitudinal axis, the frame structure including means for receiving the mounting means in said effective position, the receiving means being carried by the frame structure intermediate the pair of supporting plates extending laterally from the opposite sides of the frame structure, other means passing through the pierc-

ing means for securing the mounting means in said receiving means and in said effective position between the pair of laterally extending plates of the frame structure, the absorbent member being depressed by the first means and pierced by the second means of the mounting means along the longitudinal axis of the absorbent member so as to form a longitudinally extending depression in said absorbent member maintained by said mounting means intermediate the pair of laterally extending plates supporting the absorbent member, the aforesaid supporting plates being so arranged in relation to the absorbent member and the mounting means that the aforesaid absorbent member may be effectively depressed by the mounting means and thereby formed into a pair of juxtaposed roll shaped absorbent portions extending longitudinally on the respective supporting plates and maintained in an operative relation by said mounting means.

2. The improvement defined by claim **1** in which said first and second means of said mounting means includes a mounting strip having a body portion and prong means projecting from said body portion, the first means including the body portion to compress the absorbent member and the second means including the prong means to pierce the absorbent member, and the absorbent member being depressed by the body portion of the mounting strip and the prong means being positioned in said piercing relation upon the mounting strip of the mounting means being so effectively positioned in relation to said absorbent member as to compress the absorbent member along said longitudinal axis of the absorbent member, and thereupon the prong means of the mounting strip being positioned in said piercing relation with the absorbent member along the longitudinally extending depression in said absorbent member, the prong means of said mounting strip being positioned in the receiving means carried by the frame structure upon the prong means being effectively positioned in said piercing relation with said absorbent member.

3. The improvement defined by claim **1** including said pair of supporting plates being positioned adjacent a side surface of the pair of juxtaposed roll shaped portions respectively of the absorbent member, the receiving means carried by said frame structure including a bifurcated end portion for receiving the effectively positioned mounting means, the pair of supporting plates being positioned in spaced relation one to the other and extending at opposite sides of said bifurcated end portion and the effectively positioned mounting means received therein, the aforesaid supporting plates being so positioned and arranged in relation to the absorbent member and the mounting means that the aforesaid absorbent member may be effectively depressed by the mounting means and thereby formed into the pair of juxtaposed roll shaped portions of the absorbent member extending longitudinally on the respective supporting plates and maintained in said operative relation on said supporting plates by said mounting means.

4. The improvement defined by claim **1** including said pair of supporting plates being positioned adjacent a side surface of the pair of juxtaposed roll shaped portions respectively of the absorbent member, the pair of supporting plates being positioned in spaced relation one to the other and extending at opposite sides of said mounting means effectively positioned in the receiving means carried by said frame structure, the first and second means of the mounting means including a mounting strip having a body portion and a plurality of prongs projecting from the body portion, the first means including the body portion to compress the absorbent member, and the second means including the plurality of prongs to pierce the absorbent member upon the mounting strip being effectively positioned into the receiving means carried by the frame structure between said pair of supporting plates, said prongs projecting in spaced relation from the body portion of the mounting strip and through a portion of the absorbent member along the longitudinally extending depression in said absorbent member, the aforesaid supporting plates being so positioned and arranged in relation to the absorbent member and the mounting strip that the aforesaid absorbent member may be effectively depressed by the body portion of the mounting strip and thereby formed into the pair of juxtaposed roll shaped portions of the absorbent member extending longitudinally on the respective supporting plates, and said other means passing through and securing in said receiving means portions of said prongs projecting through said absorbent member and positioned in said receiving means between said pair of laterally extending supporting plates of the frame structure.

5. In a cleaning implement of a type defined by claim **1** in which the absorbent member comprises a rectangular block of a sponge-like resilient water absorbent material and having a longitudinal axis; the rectangular block being enclosed within a reticulated abrasive member and extending outwardly from opposite sides of the frame structure of the cleaning implement; the improvement in which the mounting means includes a comb-like member positioned in an engaging relation with said rectangular block and reticulated abrasive member, the rectangular block of said resilient water absorbent material and said reticulated abrasive member being depressed by the comb-like member being so positioned in said engaging relation along the longitudinal axis of the rectangular block, and the comb-like member being positioned in said engaging relation with said rectangular block and reticulated abrasive member along said longitudinally extending depression in the block, the receiving means carried by the frame structure including a bifurcated end portion for receiving the comb-like member positioned in said engaging relation with said rectangular block and reticulated abrasive member, the pair of supporting plates projecting angularly and laterally from opposite sides of said bifurcated end portion of the frame structure, and said other means securing the comb-like member in the bifurcated end portion and thereby in engaging relation with said rectangular block and said reticulated abrasive member.

6. In a cleaning implement of a type defined by claim **1** in which the absorbent member comprises a rectangular block of a sponge-like resilient water absorbent material and having a longitudinal axis; the rectangular block being enclosed within a reticulated abrasive member and extending outwardly from opposite sides of the frame structure of the cleaning implement; the improvement in which the mounting means includes a comb-like member positioned in an engaging relation with said rectangular block and reticulated abrasive member, the rectangular block of said resilient water absorbent material and said reticulated abrasive member being depressed by the comb-like member being so

positioned in said engaging relation along the longitudinal axis of the rectangular block, and the comb-like member being positioned in said engaging relation with said rectangular block and reticulated abrasive member along said longitudinally extending depression in the block, the receiving means carried by the frame structure including a bifurcated end portion for receiving the comb-like member positioned in said engaging relation with said rectangular block and reticulated abrasive member, the pair of supporting plates projecting angularly and laterally from opposite sides of said bifurcated end portion of the frame structure, the pair of supporting plates being positioned adjacent a side surface of a pair of juxtaposed roll shaped portions respectively of the rectangular block of said absorbent member, the pair of supporting plates being so positioned and arranged in relation to the rectangular block and the comb-like member that the aforesaid rectangular block may be effectively depressed by the comb-like member and thereby formed into the pair of juxtaposed roll shaped portions of the rectangular block extending longitudinally on the respective supporting plates, and said other securing means retaining the comb-like member in the bifurcated end portion and thereby in engaging relation with said rectangular block and said reticulated abrasive member.

7. The improvement defined by claim **1** in which the frame structure includes a bifurcated end portion defined by a pair of fastening plates positioned in spaced relation one to the other of said end portion of the frame structure, each of the fastening plates having one of the respective supporting plates formed integrally therewith and projecting angularly and laterally from one of each of the fastening plates, said pair of supporting plates being positioned adjacent a side surface of the pair of juxtaposed roll shaped portions respectively of the absorbent member, said fastening plates being positioned in said spaced relation and at opposite sides of said mounting means, said other means passing through and securing the piercing means between the fastening plates with the pair of supporting plates being positioned in spaced relation one to the other and extending at opposite sides of the mounting means secured between said fastening plates by said other means, the aforesaid supporting plates being so positioned and arranged in relation to the absorbent member and the mounting means that the absorbent member may be effectively depressed by the mounting means and thereby formed into the pair of juxtaposed roll shaped portions of the absorbent member extending longitudinally on the respective supporting plates.

8. The improvement defined by claim **7** in which said mounting means includes a mounting strip having a body portion and a plurality of prongs positioned between said pair of fastening plates, said prongs projecting in spaced relation from the body portion of the mounting strip and through a portion of the absorbent member along the longitudinally extending depression in said absorbent member, the aforesaid supporting plates being so positioned and arranged in relation to the absorbent member and the mounting strip that the aforesaid absorbent member may be effectively depressed by the body portion of the mounting strip and thereby formed into the pair of juxtaposed roll shaped portions of the absorbent member extending longitudinally on the respective supporting plates, the other securing means fastening portions of said prongs projecting through said absorbent member and thereby said body portion of the mounting strip between said pair of fastening plates at said bifurcated end portion of the frame structure, and the body portion of said mounting strip secured between said fastening plates by said other means retaining said pair of juxtaposed roll shaped portions of the absorbent member on the respective laterally extending supporting plates during compression and deformation thereof in operative use on a surface to be cleaned by the cleaning implement.

* * * * *

UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 3,783,469 Dated January 8, 1974

Inventor(s) HERBERT A. SIEMUND

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

On the cover sheet [57] Abstract, line 2, after "the" and before "ab-", insert -- frame structure, and a pair of roll shaped portions of an -- .

Signed and sealed this 6th day of August 1974.

(SEAL)
Attest:

McCOY M. GIBSON, JR.
Attesting Officer

C. MARSHALL DANN
Commissioner of Patents

FORM PO-1050 (10-69)

USCOMM-DC 60376-P69
* U.S. GOVERNMENT PRINTING OFFICE : 1969 O—366-334.