Dec. 18, 1956 S. P. VAUGHN 2,774,092

MOP DEVICE, TOGGLE OPERATED

Filed Oct. 31, 1951 2 Sheets-Sheet 1

FIG. 1.

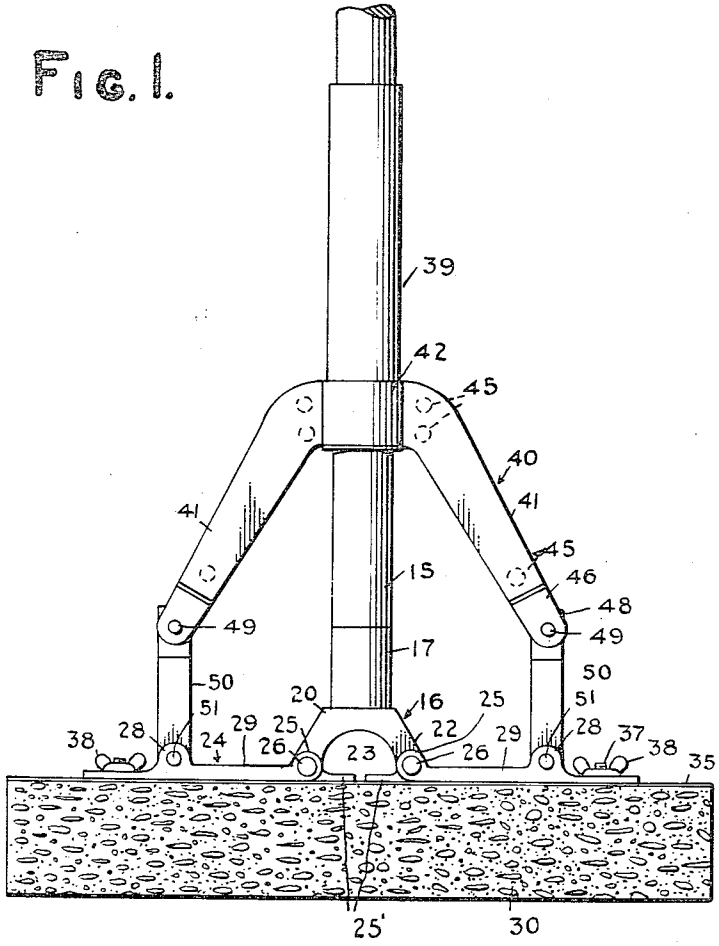


FIG. 2.

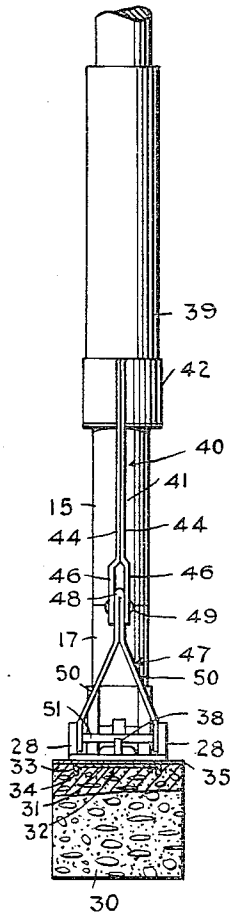
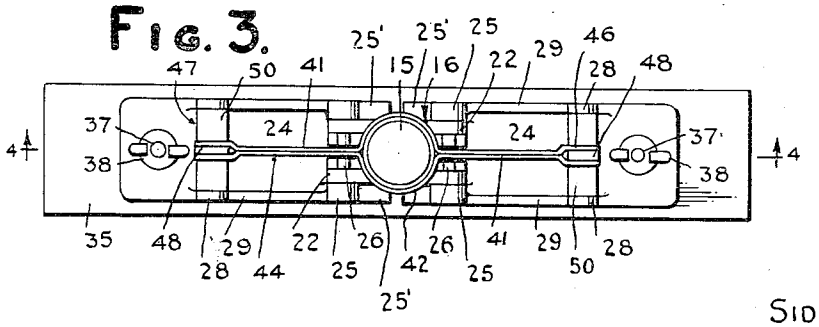


FIG. 3.



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FIG. 4.

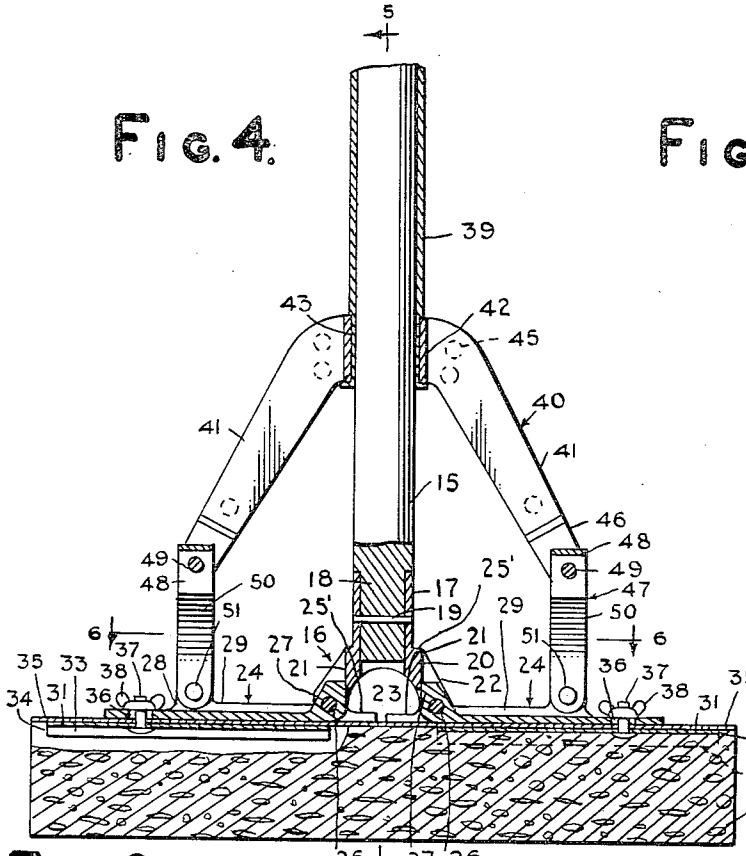


FIG. 5.

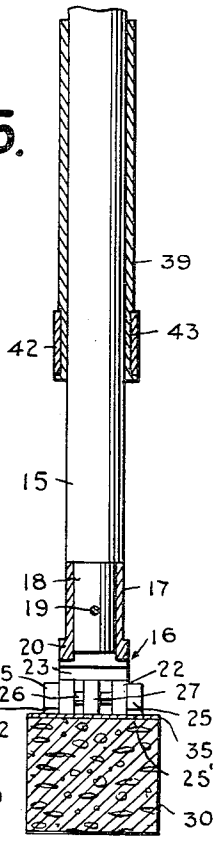


FIG. 6.

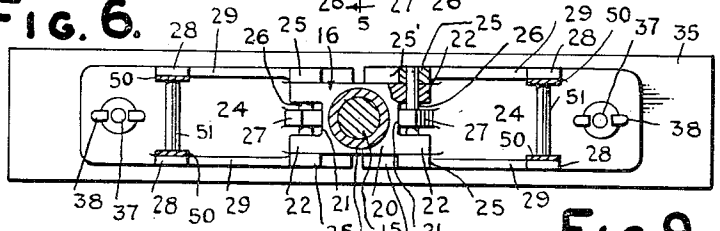


FIG. 7.

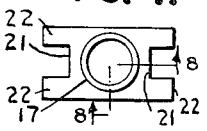


FIG. 11.

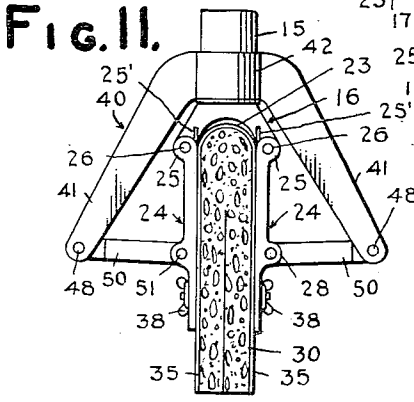


FIG. 9.

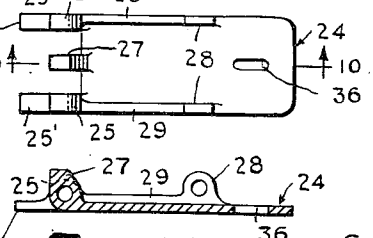
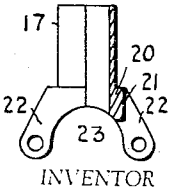


FIG. 10.

FIG. 8.



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2,774,092

MOP DEVICE, TOGGLE OPERATED

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Application October 31, 1951, Serial No. 254,133

14 Claims. (Cl. 15—119)

My invention relates to a mop device.

Important objects of the invention are, to provide a thick resilient sponge mop element which serves to shift the pressure plates to the open position, with means to limit the opening movement of the pressure plates so that they may be held at substantially a right angle to the longitudinal axis of the handle by the resilient action of the thick resilient sponge mop element; to provide a mop device having a recess for receiving the intermediate portion of the sponge mop element when the sponge mop element is folded upon itself and compressed to permit of such proper folding action; to provide means for folding the sponge mop element transversely upon itself; to provide an operative connection between the slide handle and pressure plates which will prevent relative turning movement of the slide handle; to provide a mop device in which the sponge mop element may be readily changed; to provide a mop device of simple construction having means whereby the water may be readily squeezed out of the sponge mop element and the sponge mop element cleaned by repeated squeezing actions while submerged in the water or under a water faucet; to provide a mop device having a sponge mop element which is longer than the conventional sponge mop element and which may be used in connection with the usual household pail by partly transversely folding the sponge mop element upon itself prior to insertion within the pail; to provide a mop device that can be used under most furniture or overhanging parts close to the floor and to provide means whereby the sponge mop element will readily enter corners or unaccessible places usually found in a home; to provide a moist sponge mop element, or a dry sponge mop element for cleaning hardwood floors, carpets or the like and to provide a mop device so constructed that the face of the sponge mop element can be used in all cleaning or scrubbing operations; to provide a mop device having means whereby the handle of the device may be held at about 45 degrees from the vertical, so that the sponge element will have the side thereof next to the operator compressed while its opposite or forward side will be distended and will be arranged in a position forwardly of the attaching head for reaching into corners or other unaccessible places; to provide a toggle structure connecting the slide handle and pressure plates whereby the pressure plates can be swung upon their pivots by the reciprocation of the slide handle and adequate pressure applied to resilient sponge mop element to squeeze the water from the same.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this application and in which like numerals are employed to designate like parts throughout same,

Figure 1 is a side elevation of a mop device embodying my invention showing the mop element and pressure plates in the open position,

Figure 2 is an edge elevation of the mop device shown in Figure 1, a portion being in section,

Figure 3 is a plan view of the same,

Figure 4 is a vertical section taken on line 4—4 of Figure 3,

Figure 5 is a transverse vertical section taken on line 5—5 of Figure 4,

Figure 6 is a horizontal section taken on line 6—6 of Figure 4,

Figure 7 is a plan view of the attaching head for the pressure plates.

Figure 8 is a vertical section taken on line 8—8 of Figure 7,

Figure 9 is a plan view of one of the pressure plates,

Figure 10 is a longitudinal section taken on line 10—10 of Figure 9,

Figure 11 is a side elevation of the mop device showing the pressure plates and mop element in the closed or compressing position.

In the drawings, where for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 15 designates a handle having an attaching element or head 16 secured thereto. This attaching element is generally in the form of a yoke or inverted U-shaped. The attaching element comprises a sleeve 17, receiving the reduced end 18 of the handle 15 and secured to this reduced end by a transverse pin 19, the ends of which are flush with the sleeve 17. Formed integral with the lower end of the sleeve 17 is a horizontal block or attaching head 20 having vertical flats 21. The block or attaching head 20 has pairs of spaced knuckles 22 formed integral therewith and these knuckles diverge downwardly in a longitudinal direction providing a large recess 23 extending into the block or attaching head 20, as shown. The recess has a lower open end, as shown.

The numeral 24 designates pressure plates which are pivotally mounted upon the attaching element 16. Each pressure plate 24 has a pair of upstanding apertured knuckles 25 formed upon its inner end and the knuckles 25 are arranged next to and outwardly of the knuckles 22 and are pivotally connected therewith by a pin 26 passing through the apertured knuckles 25 and 22. Each pressure plate 24 is provided at its inner end with an upstanding stop element or lug 27, formed integral therewith, and this lug is apertured for the passage of the pin 26. The stop element or lug 27 projects above the knuckles 25 and is arranged to contact with the flat 21, when the pressure plate 24 is moved outwardly or upwardly to assume a position at a right angle to the central axis of the handle 15. As shown in Figure 4, the two pressure plates 24 are horizontally disposed and in alignment with each other while the handle 15 is vertical. This is an important feature of the invention as will be more fully described.

Formed integral with the pairs of knuckles 25 of the two pressure plates 24 are pairs of extensions 25', projecting inwardly beyond the knuckles 25 and pivots 26, extending longitudinally of the pressure plates, and having their outer faces flush with the outer faces of the pressure plates 24, see more particularly Figures 1, 3, 4, 6, 9 and 10. The longitudinal extensions 25' are arranged in alignment with the knuckles 25 and hence are disposed exteriorly of the sides of the attaching element or head 16 and block 20, Figures 3, 4 and 6.

Each pressure plate is also provided at its longitudinal edges with vertical apertured knuckles 28, projecting above the pressure plate and also secured to reinforcing longitudinal ribs 29.

Arranged beneath the pressure plates 24 is a compressible and resilient sponge mop element 30, which is much thicker than the conventional sponge mop element. I have found that satisfactory results are obtained by having the resilient sponge mop element 30 substantially one and three-quarters inches thick. By thickness is meant vertical

dimension with respect to the pressure plates **24** when the pressure plates are horizontal, as shown in Figure 4. The absorbent, compressible, resilient sponge mop element **30** is shown as rectangular in longitudinal and transverse vertical section. The top of the resilient sponge mop element **30** may be secured to the pressure plates by any suitable means which will leave an intermediate flexible portion of the sponge mop element **30** adjacent to and extending across the recess **23** for movement into the recess when the sponge mop element is folded transversely upon itself and compressed. One form of connecting means comprises attaching rigid plates **31** mounted upon the top of the sponge mop element **30** and arranged within a recess **32** formed in the top. Each rigid plate **31** has longitudinal flanges **33** inserted within grooves **34** formed in the sponge mop element **30**. The rigid plates **31** and flanges **33** are secured to the sponge mop element **30** by an adhesive. Arranged upon the upper faces of the rigid plates **31** is a flexible backing sheet **35**, which is preferably formed of cloth. This backing sheet has its lower surface secured to the upper faces of the rigid plates **31** and the upper face of the sponge mop element **30** by an adhesive. The flexible backing sheet **35** extends transversely and longitudinally beyond the rigid plates **31**. The inner ends of the rigid plates **31** and their flanges **33** terminate in substantial alignment with the central longitudinal axes of the pins or pivot elements **26**. The inner ends of the plates **31** are therefore spaced and terminate short of the recess **23** when the plates **31** are in the raised position, Figure 4, to leave the recess **23** uncovered by these plates **31**. The flexible backing sheet **35**, however, extends across the recess **23**. It is thus seen that the intermediate portion of the sponge mop element **30** between the inner ends of the plates **31** remains permanently flexible whereby such intermediate portion can be folded upon itself and move upwardly into the recess **23**.

The pressure plates **24** have slots **36**, for receiving bolts or screws **37**, passing through openings in the rigid plates **31**, and the backing sheet **35**, and having their heads engaging beneath the plates **31**. These bolts carry winged nuts **38**. It is thus seen that the bolts **37** will clamp the plates **31** to the pressure plates **24** and securely hold these parts together. However, it is to be distinctly understood that the invention is not restricted to the precise means used for connecting the sponge element **30** with the pressure plates **24** as any other suitable means may be employed. The flanges **33** of the plates **31** may be omitted or the plates **31** may be omitted and the backing sheet **35** secured to the mop element **30** by an adhesive and the backing sheet then secured to the pressure plates, detachably or otherwise, by any suitable means.

Mounted to reciprocate upon the handle **15** is a tubular slide handle **39**, having a rigid yoke **40** rigidly secured to its lower end. This yoke **40** is generally inverted V-shaped and includes downwardly diverging arms **41** rigidly secured to a sleeve **42** which seats within an annular recess **43** formed in the slide handle **39**. The yoke **40** is shown as formed in two companion sections which are stamped from sheet metal whereby each arm **41** includes two layers or arm sections **44**, secured together by spot welding, as indicated at **45**. Each pair of arms **41** carry a section of the sleeve **42**. If desired, the yoke **40** may be formed from a casting. The lower end of each arm **41** is forked and provided with knuckles **46**. Each pair of knuckles **46** receives the upper end of a connecting link **47**. This link is formed from a metal strap folded upon itself to provide an upper knuckle **48** arranged between the knuckles **46** and pivoted thereto by a pin **49**. The link further comprises downwardly diverging sides **50**, the lower ends of which are apertured for pivotally receiving a pin **51** passing through the apertured knuckles **28**. By forming the links **47** generally inverted V-shaped so that each link embodies the downwardly diverging sides **50**, which sides are disposed inwardly of and bear against the knuckles **28**, these links by virtue of their connections with the arms **41** of the yoke, prevent the turning movement of the slide handle **39** upon the handle **15**.

The operation of the mop device is as follows:

The mop element **30** is resilient and when released from pressure will assume the straight position as shown in Figure 4. With the mop element **30** being attached to the pressure plates **24** by the means shown and described, when the mop element **30** is in the straight position, Figure 4, the stop elements **27** will engage the flats **21**. The upward movement of the pressure plates **24** with respect to the handle **15** is therefore limited and the pressure plates **24** are held at a right angle to the central longitudinal axis of the handle **15** and will be horizontal when the handle **15** is vertical, Figure 4. When the pressure plates **24** are in the horizontal position, Figure 4, the longitudinal extensions **25'** are also horizontal and project across the recess **23**. When in this position, the longitudinal extensions **25'** act to prevent the intermediate portion of the sponge **30** from moving upwardly into the recess in mopping operations, in addition to preventing the sponge **30** from crawling from front to back around winged nuts attachments. The mop device may be used when the mop element **30** is damp or dry. The resiliency of the mop element **30**, by ivrtue of its thickness, will be found to hold the pressure plates **24** in the outermost position for the usual mopping operations. The mop element **30** may be passed under low furniture or into spaces which are relatively non-accessible and the mop element **30** may be compressed and transversely inclined to project upon one side of the pressure plates **24** when the handle **15** is held at an angle of about 45 degrees from the vertical, as indicated in Figure 4 of my Patent 2,298,320. The mop element **30** may be about eleven inches long which would be too long for insertion in the usual household pail, and the mop element will therefore be partly folded before being introduced into the pail. The folding of the mop element is effected by moving the sliding handle **39** downwardly with respect to the handle **15**. When this occurs, the pressure plates **24** swing inwardly toward each other upon the pivots **26** and the mop element **30** is folded upon its flexible intermediate portion adjacent to the recess **23**. Particular attention is called to the fact that the mop element **30** is folded upon its transverse axis and the folded portion of the mop element enters the recess **23**, Figure 11. When the pressure plates are swung downwardly and inwardly, Figures 4 and 11, the longitudinal extensions **25'** swing upwardly, until they assume positions outwardly of the recess **23**, Figure 11. It is thus seen that the longitudinal extensions **25'** swing upwardly to uncover the low end of the recess **23**, Figures 4 and 11, as the sponge is folded transversely upon its intermediate portion, so that this folded intermediate portion may follow the upwardly and outwardly moving longitudinal extensions **25'** and enter the recess **23**. In this manner, the water may be squeezed out of the mop element **30**, and the squeezing operation may be repeated a number of times while the mop element is submerged in water or held beneath a spigot discharging water. I found that satisfactory results are obtained by having the thickness or vertical dimension of the mop element **30** one and three quarter inches and when this dimension is employed, then the horizontal dimension of the recess **23** at its bottom is about one quarter to one third of twice the thickness or vertical dimension of the mop element **30**. The vertical dimension of the recess **23** from its top to its bottom, Figure 4, should be about one-half of the vertical dimension or thickness of the mop element **30**. By following these dimensions, it will be found that the folded intermediate portion of the sponge mop element will readily pass into the recess **23** when the pressure plates **24** assume the inner generally parallel position, Figure 1. The arms **41** and links **50** form a toggle, to swing the pressure plates **24** upon their pivots.

In Figure 1 of the drawings, the slide handle **39** is in the uppermost position, and is limited against further up-

ward movement by the stops 27 engaging the flats 21. Stop elements 27 also limit the upward movement of the pressure plates 24 so that they are at a right angle to the longitudinal axis of the handle 15. The yoke 40 is now in the raised position and the arms 41 are vertically inclined and the links 47 are vertical and parallel with the handle 15, Figures 1 and 4. When the slide handle 39 is moved downwardly upon the handle 15, the yoke 40 descends and the links 47 move downwardly and turn upon the pins 49, swinging the pressure plates 24 inwardly toward each other upon the pins 26. When the yoke has reached the lowermost position, which occurs at about the time that the slide handle 39 engages the block 20 of the attaching element, the links 47 are substantially horizontal, and the pressure plates 24 are substantially parallel, Figure 11. The resilient sponge mop element 30 has now been folded transversely upon its intermediate portion and subjected to suitable pressure to squeeze out the water, and the folded intermediate portion enters the recess 23 of the attaching element or head, Figure 11. When the slide handle 39 is moved upwardly, the reverse of this operation occurs and the pressure plates 24 assume the horizontal position, Figures 1 and 4, and will be retained in such position by the expanding action of the thick, resilient sponge mop element.

The arrangement of the parts are such that when the pressure plates 24 are in the opened or straight line position, the backing sheet 35 being clamped to the pressure plates by the attaching plates 31, the pressure plates 24 hold the backing sheet 35 in a straight line position. The intermediate portion of the backing sheet is therefore held against movement in the straight line position and will bear against the intermediate portion of the sponge mop element 30, opposing the upward movement of the intermediate portion of the sponge mop element, particularly between the pairs of transversely spaced extensions 25', and transversely exteriorly of said spaced extensions 25'. The attaching plates 31 terminate short of the open lower end of the recess 23 and do not extend into the recess 23. When the pressure plates are moved to the inner parallel position, the backing sheet 35 and sponge mop element 30 have their intermediate portions folded and these folded portions are free to move into the recess 23. The folded intermediate portion of the backing sheet 35 surrounds the folded intermediate portion of the sponge mop element 30 and restricts the movement of the folded intermediate portion of the sponge mop element beyond the position of the folded intermediate portion of the backing sheet. This action insures that the intermediate portion of the sponge mop element will be uniformly and properly folded and be compressed to squeeze out the water, yet permitting of the movement of the folded intermediate portions of the backing sheet and sponge mop element into the recess.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred embodiment of the same and that various changes in the shape, size and arrangement of parts may be resorted to, without departing from the spirit of my invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A mop device comprising, a handle, an attaching head secured to the handle and provided with a recess having a lower open end, opposed pressure plates provided adjacent to their inner edge portions with upwardly extending stop elements which are mounted upon the pressure plates to swing bodily with the pressure plates, pivots arranged adjacent to opposite sides of the recess and adjacent to the inner edge portions of the pressure plates and connecting the pressure plates and attaching head so that the pressure plates may be swung to opened and closed positions, the stop elements contacting with the sides of the attaching head when the pressure plates are in the opened position, the inner edge portions of the pressure plates terminating substantially exteriorly of the recess, a continuous sponge mop element secured to the lower faces of the pressure plates and having an intermediate portion extending across the lower open end of the recess when the pressure plates are in the opened position, and an operating device including a reciprocatory element mounted upon the handle to move longitudinally thereof and means operated by the reciprocatory element and bearing against the pressure plates at points between the pivots and the outer free edges of the pressure plates, the arrangement being such that the intermediate folded portion of the continuous sponge mop element moves into the recess for a considerable distance when the pressure plates are swung to the closed position.

2. A mop device comprising, an attaching head including a block and downwardly extending knuckles carried by the block, said block and knuckles being provided with a recess having its lower end open, a handle secured to the block and arranged above the recess, pressure plates to be moved to opened and closed positions and provided adjacent to their inner edge portions with knuckles disposed adjacent to the knuckles of the attaching head, pivots passing through the knuckles of the attaching head and pressure plates and connecting the pressure plates and attaching head so that the pressure plates may be swung to opened and closed positions, the inner edge portions of the pressure plates terminating substantially exteriorly of the recess, stop elements mounted upon the plates adjacent to their inner edge portions to swing bodily therewith and extending above the same to contact with the sides of the attaching head when the pressure plates are in the opened position, a continuous sponge mop element secured to the lower faces of the pressure plates and having an intermediate portion extending across the lower open end of the recess when the pressure plates are in the opened position, and means to move the pressure plates toward the closed position.

3. A mop device comprising, an attaching head provided with a recess having a lower open end, a pair of pressure plates, spaced pivot elements pivotally connecting the inner end portions of the pressure plates with the attaching head, said spaced pivot elements being arranged adjacent to the opposite sides of said recess, said pressure plates being adapted to be shifted to opened positions and extending upon opposite sides of said lower open end and being adapted to be shifted to closed positions, a sponge mop element disposed beneath the pressure plates when the pressure plates are in the opened position, a flexible backing sheet secured to the upper face of the sponge mop element and arranged between the sponge mop element and the pressure plates, attaching plates secured to the sponge mop element and arranged between the backing sheet and sponge mop element, the inner ends of the attaching plates being spaced and not projecting substantially into the opposite sides of said lower open end and the intermediate portion of the backing sheet extending across said lower open end when the pressure plates are in the opened position, means securing the attaching plates to the pressure plates, and means to swing the pressure plates to the opened and closed positions, the arrangement being such that when the pressure plates are in the opened position the intermediate portion of the backing sheet will bear against the intermediate portion of the sponge mop element and oppose its upward movement and when the pressure plates are swung to the closed position the intermediate portion of the backing sheet and sponge mop element will be folded and moved into said recess, said pivot elements being arranged upon the opposite sides of the folded backing sheet and sponge mop element when such parts move into said recess so that the pivot elements do not obstruct the movement of such folded parts into said recess, the folded intermediate portion of the backing sheet restricting the movement of the folded intermediate portion of the sponge mop element beyond the position of the folded intermediate portion of the backing sheet.

4. A mop device comprising, an attaching head provided with a recess having a lower open end, opposed pressure plates, pivots arranged adjacent to the opposite sides of said lower open end and connecting the pressure plates with the attaching head so that the pressure plates may be swung to the opened and closed positions, a sponge mop element secured to the lower faces of the pressure plates and having its intermediate portion extending across said lower open end when the pressure plates are in the opened position, extensions carried by the inner ends of the pressure plates and extending longitudinally of the pressure plates and projecting inwardly beyond the pivots when the pressure plates are in the opened position, said extensions having their lower faces substantially flush with the lower faces of the pressure plates and forming in effect continuations of such pressure plates and bearing against the intermediate portion of the sponge mop element to oppose the upward movement of such intermediate portion when the pressure plates are in the opened position, and means to move the pressure plates toward the closed position.

5. A mop device comprising, a handle, an attaching head mounted upon the handle and provided with a recess, pressure plates to assume opened and closed positions pivotally mounted upon the attaching head at points outwardly of and near the recess and provided with longitudinal extensions projecting across the recess when the pressure plates are in the opened position, means for securing a sponge mop element to the pressure plates so that the intermediate portion of the sponge mop element extends across the recess and is disposed outwardly of the longitudinal extensions to bear against the longitudinal extensions when the pressure plates are in the opened position, and means mounted upon the handle to swing the pressure plates upon their pivots, the longitudinal extensions moving upwardly with relation to the recess when the pressure plates are swung toward the closed position.

6. A mop device comprising, a handle, an attaching head mounted upon the handle and provided with a recess, said attaching head having apertured knuckles, pressure plates to assume opened and closed positions and provided upon their inner ends with apertured knuckles disposed adjacent to the apertured knuckles of the attaching head, pivot elements passing through the apertured knuckles of the attaching head and the apertured knuckles of the pressure plates, longitudinal extensions formed integral with the apertured knuckles of the pressure plates and extending inwardly beyond such apertured knuckles and projecting across the recess when the pressure plates are in the opened position, the longitudinal extensions having their outer faces substantially flush with the outer faces of the pressure plates, means for securing a sponge mop element to the pressure plates and arranging the intermediate portion of the sponge mop element across the recess and outwardly of the longitudinal extensions when the pressure plates are in the opened position, and means mounted upon the handle to swing the pressure plates upon their pivots so that the sponge mop element is folded upon its intermediate portion and such intermediate portion moves into the recess, the longitudinal extensions moving upwardly in advance of the folded intermediate portion.

7. A mop device comprising, a handle, an attaching head secured to the handle, elongated pressure plates pivotally mounted upon the attaching head, elongated flanges formed integral with each pressure plate and extending throughout the major portion of the length of the pressure plate, said flanges being disposed adjacent to the longitudinal edges of the pressure plate and serving to reinforce and stiffen the pressure plate, said flanges extending above the pressure plate when the pressure plate is in the opened position, a slide handle mounted upon the first-named handle, a yoke carried by the slide handle, links pivotally connected with the yoke,

each link including a pair of downwardly diverging sides, said sides having apertures near their lower ends, a pivot element passing through the apertures of the sides of each link, said pivot element being carried by the flanges of each pressure plate, the sides of each link being arranged inwardly of and adjacent to and bearing against the flanges of the corresponding adjacent pressure plate.

8. A mop device comprising, an integral attaching head including spaced sides and a recess between said sides, the recess having a lower open end, a handle having the attaching head secured thereto, opposed pressure plates, pivots arranged adjacent to the opposite sides of said lower open end and connecting the pressure plates with the attaching heads so that the pressure plates may be swung to opened and closed positions, a sponge mop element secured to the lower faces of the pressure plates and having an intermediate portion extending across said lower open end when the pressure plates are in the opened position, a backing sheet secured to the upper face of the sponge mop element, extensions secured to the inner ends of the pressure plates and extending longitudinally of the pressure plates and projecting inwardly beyond the pivots when the pressure plates are in the opened position, said extensions bearing against the intermediate portions of the backing sheet and sponge mop element when the pressure plates are in the opened position, and means to move the pressure plates toward the closed position.

9. A mop device comprising, a handle, an attaching head secured to the handle, pressure plates to extend upon opposite sides of the attaching head and to be swung with relation to the attaching head, flanges carried by each pressure plate and extending longitudinally of the pressure plate throughout the major portion of the length of the pressure plate, said flanges being spaced transversely of the pressure plate and arranged adjacent to the longitudinal edges of the pressure plate to reinforce the same and extending above the pressure plate when the pressure plate is in the opened position, a yoke mounted upon the handle to move longitudinally thereof, pivot means connecting the inner ends of the elongated flanges of the pressure plates and the attaching head, links, each link including a pair of downwardly diverging sides, means pivotally connecting the upper ends of said links with the yoke, means pivotally connecting the lower ends of the sides of each link with the elongated flanges of the corresponding pressure plate and such lower ends bearing against such elongated flanges to oppose the turning movement of said yoke upon said handle.

10. A mop device comprising, a handle, an attaching head secured to the handle, elongated pressure plates extending upon opposite sides of the attaching head, elongated flanges carried by each pressure plate and extending longitudinally throughout the major portion of the length of the pressure plate and arranged adjacent to the longitudinal edges of the pressure plate and projecting above the pressure plate when the pressure plate is in the opened position, said flanges serving to reinforce and stiffen the pressure plate, a yoke mounted upon the handle to move longitudinally thereof, pivot means connecting the inner ends of the elongated flanges of the pressure plates and the attaching head, links, each link being formed from an integral section bent upon itself for providing spaced opposed sides, means pivotally connecting the upper ends of said links with said yoke, means pivotally connecting the lower ends of said sides of each link with the elongated flanges of the corresponding pressure plate and such lower ends being disposed adjacent to and bearing against such elongated flanges.

11. A mop device comprising, an attaching head, a handle secured to the attaching head, elongated pressure

plates extending upon opposite sides of the attaching head, elongated flanges formed upon each pressure plate and extending longitudinally throughout the major portion of the length of the pressure plate, said flanges being arranged adjacent to the longitudinal edges of the pressure plate to reinforce and stiffen the same and projecting above the pressure plate when the pressure plate is in the opened position, separate companion sleeve sections having radially extending portions, means for securing the radially extending portions together and the companion sleeve sections then forming a sleeve which is mounted upon the handle for movement longitudinally of the handle, arms carried by the radial extensions, the arms and sleeve forming a yoke, links, each link including an integral section bent upon itself to form opposed spaced sides, means to pivotally connect the upper end of each link with the corresponding arm, and means to pivotally connect the lower ends of the sides of each link with the elongated flanges of the corresponding pressure plate.

12. A mop device comprising, a handle, a rigid unitary attaching head secured to the handle, said attaching head including a body portion and spaced members carried by the body portion and formed integral therewith, said spaced members extending downwardly below the body portion and forming with the body portion a deep recess having a lower open end, said members being immovable with relation to the body portion and in relation to each other, pressure plates, spaced separate pivot elements pivotally connecting the inner end portions of the pressure plates with said members, the pivot elements being arranged exteriorly of the recess and spaced from the upper end of the recess, said plates being shiftable to opened and closed positions, parts of said unitary attaching head being arranged to contact with parts of said pressure plates to limit the opening movement of the pressure plates, a sponge mop element arranged beneath the pressure plates and secured thereto and including a continuous intermediate portion extending across the lower open end of said recess when said pressure plates are in the opened position, and means to swing the pressure plates to the inner position, said means being separate from the unitary attaching head and including an element mounted upon the handle to move longitudinally thereof.

13. A mop device comprising, a handle, a rigid unitary attaching head secured to the handle, said attaching head including a body portion and spaced members carried by the body portion and formed integral therewith, said spaced members extending downwardly below the body portion and forming with the body portion a deep recess having a lower open end, said members being immovable with relation to the body portion and with relation to each other, pressure plates, spaced separate pivot elements pivotally connecting the inner end portions of the pressure plates with said members, the pivot elements being arranged exteriorly of the recess and at an elevation near the lower end of the recess and spaced from the upper end of the recess, said plates being shiftable to opened and closed positions, parts of said unitary attaching head next to said recess and adjacent to the pivot elements serving to contact with parts of said pressure plates to limit the opening movement of said pressure plates, a sponge mop element arranged beneath the pressure plates and secured thereto and including a continuous intermediate portion extending across the lower open end of said recess when said pressure plates are in the opened position, said recess having a vertical dimension substantially equal to one-half of the vertical dimension of the sponge mop element, and means to swing the pressure plates toward the inner position, said means being separate from the unitary attaching head and including an element mounted upon the handle to move longitudinally thereof and elements bearing against the pressure plates at points spaced from the pivot elements of the pressure plates.

14. A mop device comprising, an attaching head provided with a recess having a lower open end, a pair of pressure plates, spaced pivot elements pivotally connecting the inner end portions of said pressure plates with said attaching head, said pivot elements being arranged adjacent to the opposite sides of said recess, said recess projecting above said pivot elements, said pressure plates being adapted to be shifted to opened and closed positions and extending upon opposite sides of said lower open end, a sponge mop element disposed beneath the pressure plates when the pressure plates are in the opened position and having an intermediate portion to extend across said lower open end, a flexible backing sheet secured to the upper face of the sponge mop element and arranged between the sponge mop element and the pressure plates and having an intermediate portion extending across the intermediate portion of the sponge mop element, means for securing the sponge mop element and the backing sheet to the pressure plates, and means to swing the pressure plates to the opened and closed positions, the arrangement being such that when the pressure plates are in the opened position the intermediate portion of the backing sheet will bear against the intermediate portion of the sponge mop element and oppose its upward movement and when the pressure plates are swung to the closed position the intermediate portion of the backing sheet and sponge mop element will be folded and moved into said recess, said pivot elements being arranged upon the opposite sides of the folded backing sheet and sponge mop element and therefore not obstructing the movement of these folded parts into said recess, the folded intermediate portion of the backing sheet restricting the movement of the folded intermediate portion of the sponge mop element beyond the position of the folded intermediate portion of the backing sheet.

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