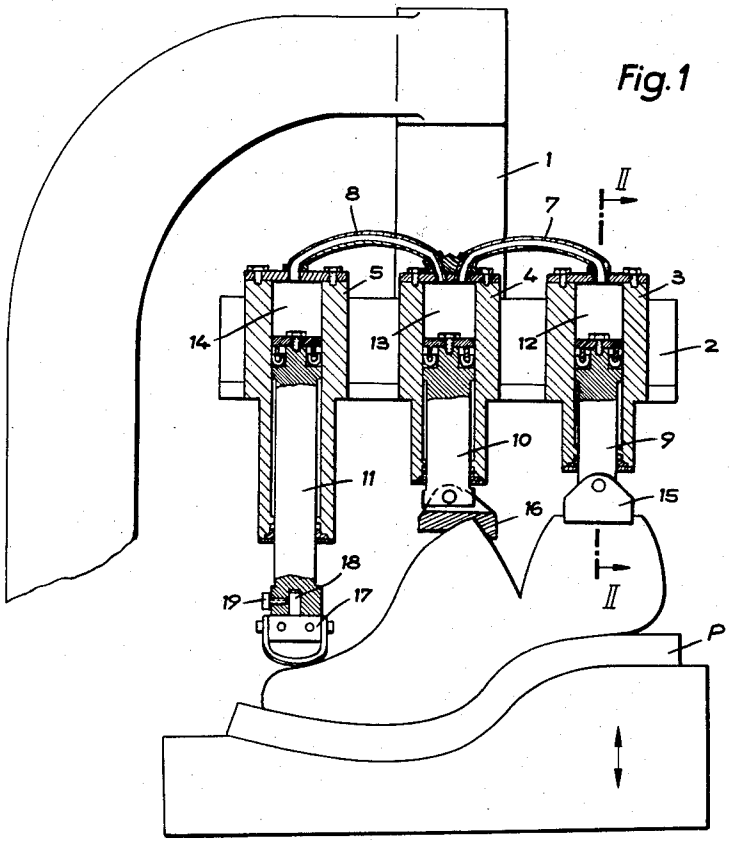
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SHOE CEMENTING PRESS

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Fig. 1



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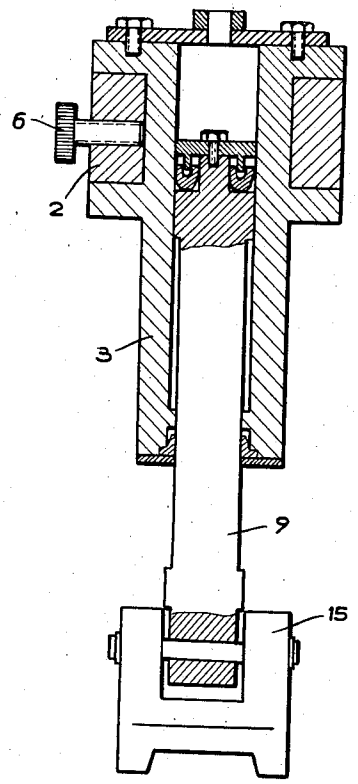


Fig.2

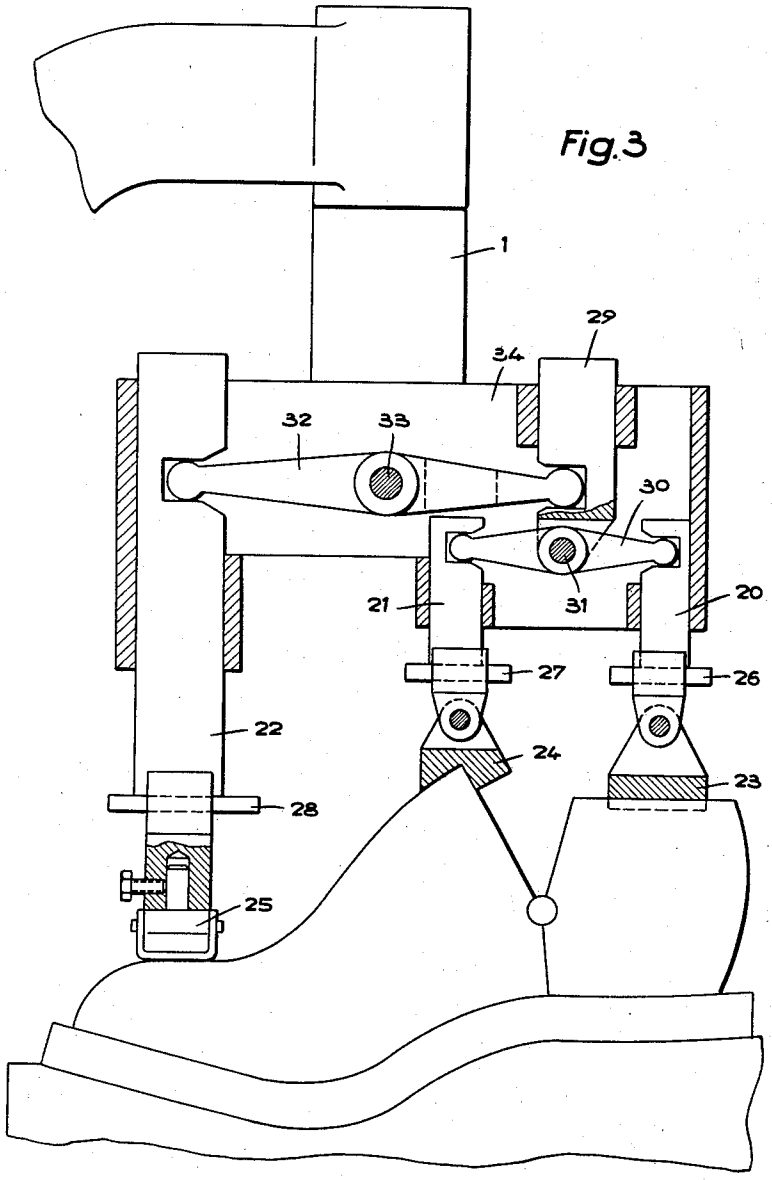
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Fig. 3



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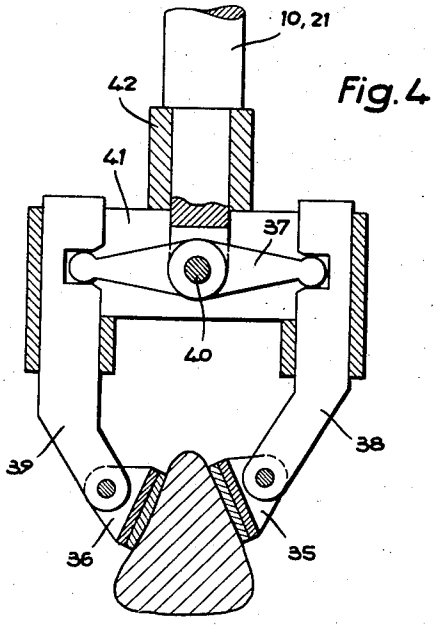
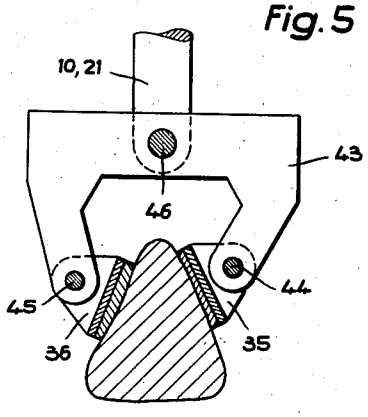


Fig. 4

Fig. 5



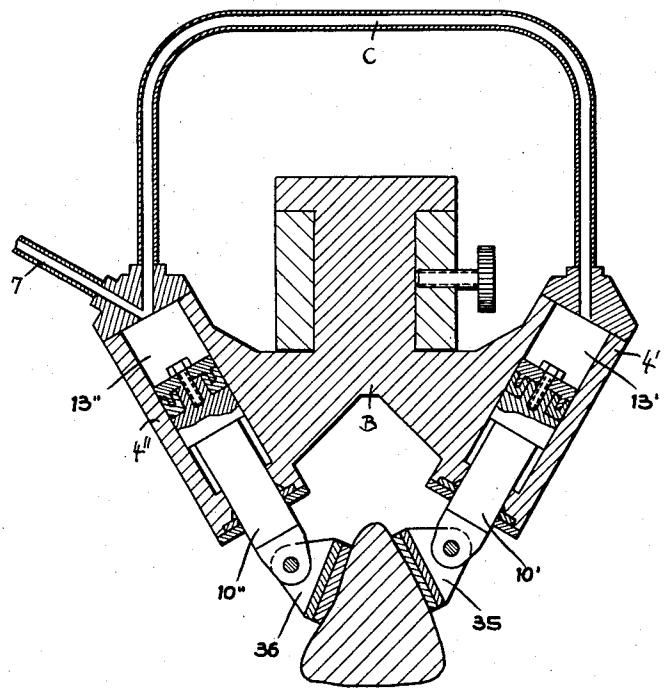
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Fig.6



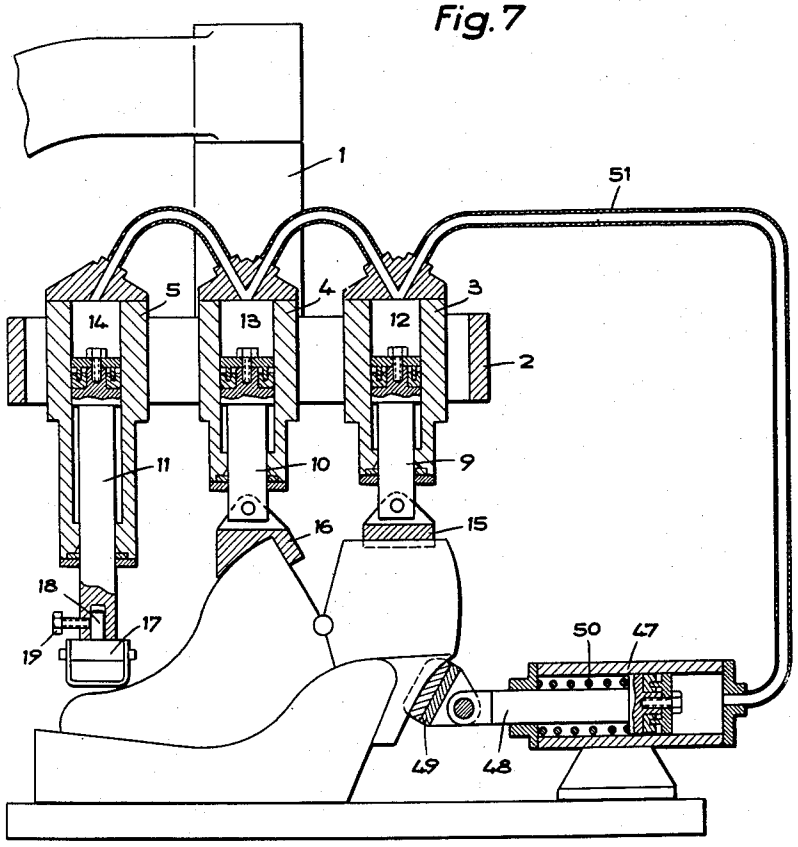
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Fig. 7



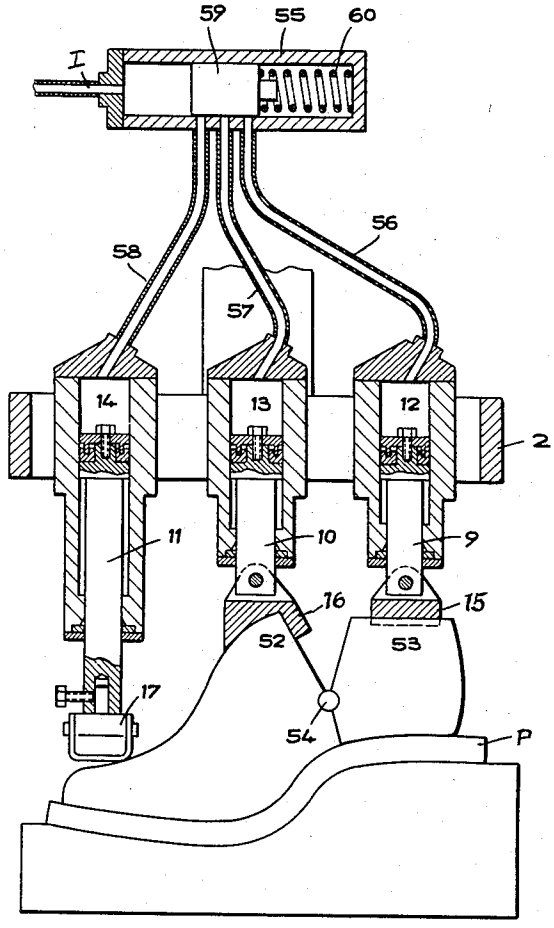
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Fig. 8



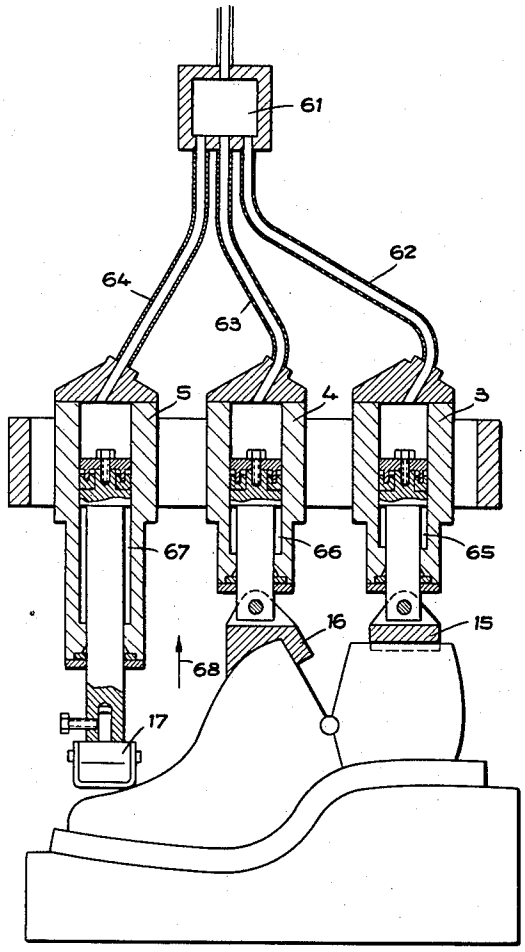
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Fig. 9



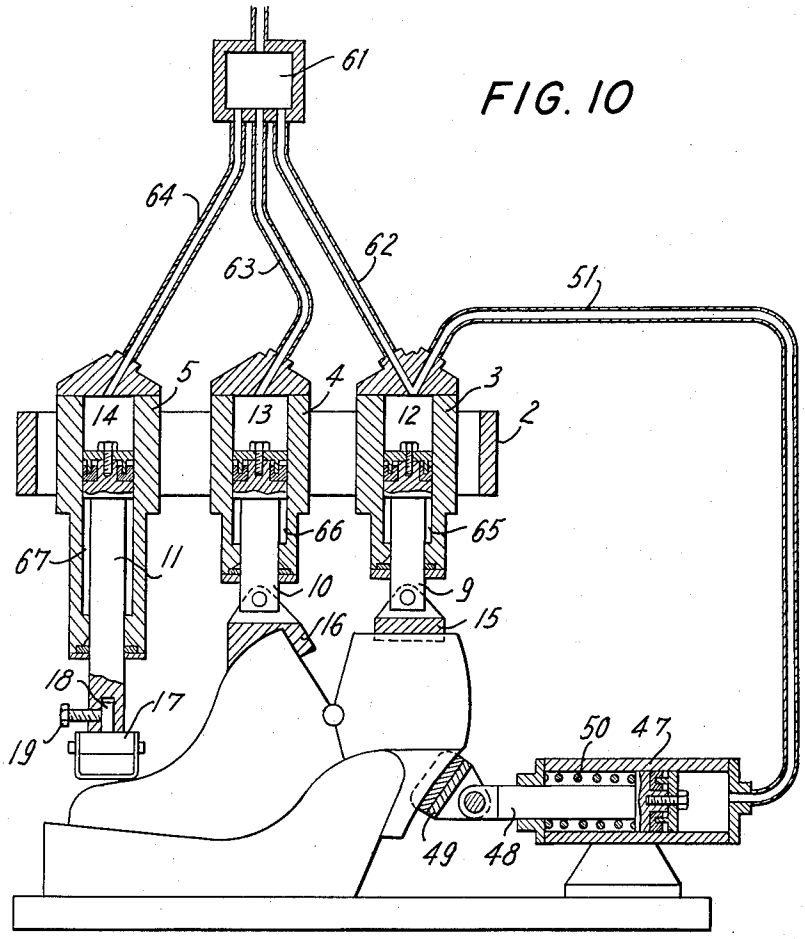
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FIG. 10



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United States Patent Office 2,968,054 Patented Jan. 17, 1961

2,968,054

SHOE CEMENTING PRESS

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Filed June 10, 1957, Ser. No. 664,601

Claims priority, application Germany June 9, 1956

17 Claims. (Cl. 12—33)

The present invention relates to new improvements in shoe cementing presses.

Presses of this type are commonly known for the purpose of attaching a cement covered sole to a shoe by means of the pressure provided either by the inflation of a cushion pad upon which the lasted shoe rests or by pressing the inflated cushion pad against the sole by other means. In order to give a lasted shoe an adequate support against the action of such cushion pad against the sole, different types of back-pressure members have been provided which are adapted to act upon the shoe at two different points, namely, by pressing upon the toe portion of the shoe and the heel portion of the last. These toe and heel pressure members are usually movable and adjustable both in a horizontal direction longitudinally of the last shoe by being slidable in suitable guideways, and in a vertical direction by means of a threaded bolt or a rack-and-pinion drive or the like. Such shoe supports acting upon the shoe at only two points are, however, in many cases insufficient since the entire central part of the shoe and last remains unsupported. These types of shoe supports also have the disadvantage that whenever their vertical position has to be changed, they have to be readjusted by hand. Furthermore, if the last in the shoe is of the notched type, the pressure of the cushion pad counteracted only at the front and heel portions of the last may easily crack or break the last at the notch. Such two-point supports also have the disadvantage that the pressure of the toe support upon the shoe may easily become excessive and leave a permanent imprint on the shoe.

It has therefore already been proposed to support the shoe at three different points, namely at the toe portion of the shoe, at the heel portion of the last, and at the crest of the last. One of these known back-pressure applying devices consists of a pivotable main pressure arm on which a double-armed supporting element is pivotably mounted and adjustable in several positions longitudinally of the main arm. Near one end, this supporting element has a longitudinal guideway on which a heel pressure member is both slidably and pivotably mounted. At its other end, the supporting element carries another pivotable double arm which carries two further pivotable pressure members at its opposite ends, namely, one for pressing upon the toe portion of the lasted shoe and the other for pressing upon the crest of the last. These two pressure members may also be adjusted in different positions longitudinally of their supporting arm. Since this pressure applying device consists of a system of freely pivotable levers, and the individual pressure members thereof have no guiding support in a vertical direction, the shoe resting upon the cushion will always tend to slip and shift thereon, particularly toward the rear, when the main pressure arm is pivoted downwardly and locked and often also during the sole-pressing operation itself.

It is an object of the present invention to provide a back-pressure applying device for a shoe cementing press

which consists of at least three pressure members, and which is designed so as to avoid the disadvantages of similar back-pressure devices as previously proposed.

More particularly, it is an object of the present invention to provide a back-pressure applying device for a shoe cementing press in which three or more pressure members are pivotally mounted and adapted to act upon a lasted shoe on at least three different points in such a manner that a change in the vertical position of one or two pressure members also automatically changes the vertical position of the one or two remaining pressure members. Furthermore, the three pressure members should be adjustable in a lateral direction relative to each other, that is, in the longitudinal direction of the shoe to be pressed.

A further object of the present invention is to provide a back-pressure applying device of the type as above described in which the means which are adapted to take up the forces to which the pressure members are subjected are positively guided so as to be movable in only one direction.

A preferred embodiment of the invention consists in the provision of separate but interconnected hydraulic means for controlling the position of each of the three pressure members relative to the lasted shoe to be worked upon. More specifically, this embodiment consists of at least three cylinders which are interconnected with each other by suitable conduits and in each of which, under the action of a suitable hydraulic medium, a piston is slidable which has a piston rod rigidly secured thereto. This piston rod carries a pressure member at its lower end and is guided in the cylinder so as to be movable only in a straight direction. Since the individual cylinders communicate with each other by conduits, an adjustment in the vertical position of one pressure member caused by the action of the inflated cushion against the sole of the shoe will result in a change of pressure in the cylinder in which the piston rod of that pressure member is guided, and such pressure will be transmitted to the other cylinders so as to cause an automatic adjustment of the other pressure members relative to the shoe or last.

Although it is already known in the art of shoe cementing presses to utilize hydraulic means for exerting a back-pressure upon a last of a shoe, these prior devices have no more in common with the present invention than such hydraulic operation since they merely consist of a single pressure member which acts upon the last by means of two pressure-applying surfaces and is pivotable and slidable in a cylinder by means of a piston.

Another preferred feature of the present invention consists in the provision of means for varying and releasing the hydraulic pressure in the conduits connecting the cylinders with each other or for separating or shutting off the individual connecting conduits from each other so as to avoid any possible pivotal movements of the pressure members during the pressing operation. The individual pressure members may be adjusted in the longitudinal direction of the lasted shoe.

Another feature of the invention consists in mounting the cylinders so as to be individually adjustable in the longitudinal direction of the shoe. For this purpose the cylinders containing the pistons and plungers are mounted on a common horizontal guideway at a suitable level above the frame of the cementing press, and are adapted to be shifted to different positions relative to each other and to be secured in such positions by suitable means. Such relative adjustability of the cylinders requires the pressure-resistant connecting conduits to be made of a flexible material.

Instead of providing such hydraulic means for the control of the individual pressure members acting upon a

lasted shoe, the present invention also includes a modification according to which each pressure member is pivotably mounted at the lower end of a positively guided rod and these three rods are connected with each other by means of double-armed levers. This lever system is likewise arranged to produce an automatic adjustment of the relative position of the different pressure members. According to the invention it is further advisable to provide the pivoting point of one of these double levers on another guide rod to which one end of the second double-lever is also pivotably connected. Since the length of these two double levers is fixed, this type of construction does not permit the guide rods and the pressure members thereon to be adjusted relative to each other in the longitudinal direction of the lasted shoe. The invention therefore provides for an adjustability of the pressure members themselves in a direction transverse to the direction of their guide rods, for example, by providing the lower end of each guide rod with a guideway extending transversely to the guide rod and by mounting the respective pressure member on such guideway so as to be slidably adjustable thereon and to be secured in different positions relative to each other.

Further objects, features, and advantages of the present invention will be apparent from the following detailed description thereof, particularly when read with reference to the accompanying drawings, in which:

Fig. 1 shows a side view, partly in cross section, of the upper part of a shoe cementing press according to the invention;

Fig. 2 shows a cross section taken along line II—II of Fig. 1;

Fig. 3 shows a side view, partly in cross section, of the upper part of a shoe cementing press according to a modification of the invention;

Fig. 4 shows a cross section through a double pressure member according to the invention for acting upon the crest portion of a shoe last;

Fig. 5 shows a cross section through a simplified modification of the double pressure member according to Fig. 4;

Fig. 6 shows a cross section through another modification of the double pressure member according to the invention with hydraulic operating means;

Fig. 7 shows a cross section through the upper part of a shoe cementing press similar to that shown in Fig. 1, but additionally provided with a pressure member acting upon the heel of a shoe;

Fig. 8 shows a cross section through another modification of the pressure system according to Fig. 1 in which the conduits connecting the individual cylinders with each other may be shut off from each other;

Fig. 9 shows still another modification of the pressure system according to Fig. 1, in which the cylinders and conduits are connected through a manifold to a source of pressure and suction; and

Fig. 10 shows a cross section of an embodiment in which the conduits are connected through a manifold including an additional pressure member acting on the heel of the shoe.

Referring to the drawings, and first particularly to Figs. 1 and 2, the main pressure arm **1** of the upper portion of the frame of a sole cementing press carries a guideway **2** which is rigidly secured to arm **1** and extends in a direction transverse thereto. Three vertical cylinders **3**, **4**, and **5** extending parallel to each other are slidably mounted within guideway **2** and are thus adjustable in a horizontal direction relative to each other to permit each pressure member to be secured in the proper position in accordance with the differences in size of different shoes or lasts. Setscrews **6** or any other suitable means may be provided to secure cylinders **3**, **4**, and **5** in their respective adjusted position to guideway **2**. Cylinders **3**, **4**, and **5** may be either of equal or different diameters. Each cylinder contains a piston with a piston rod **9**, **10**, or **11**, respectively, thereon which is vertically slidable therein and guided at the lower end of the cylinder. The cylinder chambers **12**, **13**, and **14** are closed at their upper ends and connected with each other by flexible conduits **7** and **8**. Cylinder chambers **12**, **13**, and **14** and conduits **7** and **8** are adapted to be supplied with a pressure medium such as air or a liquid from a suitable pressure source and through one or more pressure conduits, not shown. Suitable vents for releasing the pressure from chambers **12**, **13**, and **14** may also be provided.

Each of piston rods **9**, **10**, and **11** carries a pressure member **15**, **16**, and **17**, respectively, on its lower end. While the central and heel pressure members **15** and **16** are preferably pivotably mounted on piston rods **9** and **10**, the toe pressure member **17** is preferably mounted on piston rod **11** by means of a pin **18** so as to be rotatable about the axis of pressure member **17**, to any suitable position in which it may then be secured by a setscrew **19** or the like. As indicated in Fig. 1, the central pressure member **16** may also be designed so as to act upon a portion of the notched surface of a last adjacent to the crest thereof.

When the press is operated and pressure pad P, on which a lasted shoe is supported is pressed against the sole of a shoe to cement the same to the upper part of the shoe, pressure members **15**, **16**, and **17** on piston rods **9**, **10**, and **11**, respectively, will automatically adjust themselves to the respective elevations of the contact surfaces of the pressure members on the shoe or last therein.

In place of mounting the three pressure members on piston rods which are movable in cylinders, and instead of balancing the relative positions of the pressure members by interconnecting the cylinders by means of conduits, the back-pressure system according to the invention may also be modified in the manner as illustrated in Fig. 3. In this embodiment, the pressure members **23**, **24**, and **25** are mounted on vertically movable guide members, such as rods **20**, **21**, and **22**, respectively, in a similar manner as pressure members **15**, **16**, and **17**, according to Fig. 1, are mounted on piston rods **9**, **10**, and **11**. Guide rods **20** and **21** are connected with each other by means of a double-armed lever **30** which is pivotable about a pin **31**. This pivot pin **31** is, in turn, secured to the lower end of another guide rod **29** which is likewise slidable in a vertical direction within a frame or housing **34** which contains the guideways for the different rods **20**, **21**, **22**, and **29** and is rigidly secured to the main pressure arm **1**. Guide rods **22** and **29** are connected with each other by means of another double-arm lever **32** which is pivotable about a pin **33** mounted in housing **34**. When a pressure pad is applied to the sole of the shoe, the individual pressure members **23**, **24**, and **25** will therefore automatically adjust themselves in a similar manner as described with respect to Fig. 1. Since guide rods **20**, **21**, **22**, and **29** are not adjustable horizontally relative to each other, it is advisable to mount pressure members **23**, **24**, and **25** on horizontal guideways **26**, **27**, and **28** on the lower ends of rods **20**, **21**, and **22**, respectively, so as to permit them to be adjusted to the size of the respective shoe or last. Simple means such as setscrews or the like may be provided to secure pressure members **23**, **24**, and **25** on guideways **26**, **27**, and **28**.

In some cases, it is impossible to apply a central pressure member of the type as illustrated in Figs. 1 and 3 so as to act upon the crest of the last. Thus, for example, if sandals or sandalettes are to be worked on, the straps of the shoes might be located high up on the last near the tip of the crest thereof. Also, shoes with closed shafts, for example, with a turned-over collar, bootees, men's half shoes or the like do not permit an application of a central pressure member of such type. In such cases it may be necessary to use

a pair of pressure members 35 and 36 which are applied to the shaft of the shoe or to the last at both sides of the crest thereof.

Although such lateral types of pressure members are known as such, the present invention also includes a new manner of applying and operating such pressure members in accordance and in combination with the new type of back-pressure applying device according to the invention. As illustrated in Fig. 4, such new double pressure element consists of the two pressure members 35 and 36 which are pivotably mounted at the lower ends of a pair of opposite guide rods 38 and 39 which are guided for vertical sliding movement in a head or housing 41 which, for example, by a socket 42, may be rigidly secured either to the piston rod 10 as shown in Fig. 1, or to rod 21 or the slide member on guideway 27 as shown in Fig. 3. A double arm 37 is pivotably mounted in head 41 on a pin 40, and the two ball-shaped ends of arm 37 engage in suitable notches near the upper ends of guide rods 38 and 39. Through such pivotal connection of the two guide rods 38 and 39, the pressure members 35 and 36 will automatically adjust themselves to the shape of the last or the lasted shoe similarly as the three pressure members 23, 24, and 25, as shown in Fig. 3, adjust themselves automatically in their relative position to each other.

Fig. 5 illustrates a simplified modification of the double pressure element shown in Fig. 4. The automatic adjustment of the pressure members to the shape of the last and the equalization of the pressure thereof is attained in this case by pivotably mounting the pressure members 35 and 36 by pins 44 and 45 on the lower ends of a bifurcated member 43 which, in turn, is pivotably mounted by means of a pin 46 on the lower end of piston rod 10 as shown in Fig. 1, or on rod 21 or the slide member on guideway 27 as shown in Fig. 3.

Fig. 6 illustrates a back-pressure device of the type as shown in Fig. 1 but modified so as not to require a mechanically operated double pressure element as shown in Figs. 4 and 5 in order to apply a back pressure upon both sides of the last or lasted shoe near the crest portion thereof. For this purpose, instead of a single piston rod 10 carrying a pressure member 16 and slidable in a cylinder 4, as shown in Fig. 1, there are two pressure members 35 and 36 provided, each of which is pivotably mounted on the lower end of a separate piston rod 10' and 10'', respectively. These piston rods are slidable within a pair of cylinders 4' and 4'' which are disposed at an angle to each other and are connected by a bracket B which is slidably mounted in guideway 2 for horizontal adjustment relative to cylinders 3 and 5, as shown in Fig. 1. For attaining an automatic adjustment of pressure members 35 and 36 to the shape of the last, cylinder chambers 13' and 13'' are connected with each other by a conduit C which, in turn, may be connected to cylinder chambers 12 and 14, for example, by conduits 7 and 8 only one of which is indicated in Fig. 6. Cylinders 4' and 4'' with piston rods 10' and 10'' may also be disposed at a different angle to each other or even extend in a vertical direction. If desired, it is also possible to design the central pressure device so that the cylinders 4' and 4'' form two separate elements which may be secured by a suitable clamping arrangement to the bracket B so as to permit them to be pivoted to different angles relative to each other.

Fig. 7 illustrates another back-pressure device of the type as shown in Fig. 1 and modified merely by the addition of a further cylinder 47 mounted on the base carrying the pressure pad and containing a piston rod 48 which is slidable therein and carries at its outer end a pressure member 49 which is adapted to be applied against the heel of the shoe to be cemented. Cylinder 47 is connected by a conduit 51 with cylinder 3. It also contains a spring 50 which acts upon piston rod 48 to retract pressure member 48 automatically from the heel when the pressure in conduits 7, 8, and 51 is released by suitable venting means, not shown. It will thus be seen that, when the conduits are placed under pressure, each individual pressure member will adapt itself automatically to the shape of the last and the lasted shoe including the heel.

While the individual cylinders as shown in Fig. 1 always remain in direct communication with each other by conduits 7 and 8 even during the sole-pressing operation, Fig. 8 illustrates a modification in which the individual conduits may be separated or shut off from each other. Such modification is advisable particularly in such instances when pivotable lasts are used. It may then easily occur that, when the last is placed under pressure from below, the central pressure member 16 will be subjected to a greater pressure than pressure member 15. If the two cylinders 12 and 13 would be connected by a conduit 7, as shown in Fig. 1, the last would be moved upwardly at the point 52 and downwardly at 53. Obviously, this would result in a deformation of the hinge 54. Similarly, if a one-piece last is deeply notched between the front and heel portions thereof, it may then crack or break apart at the weakest point. This may be avoided by the provision of a control cylinder 55. Instead of connecting the individual cylinders directly with each other, conduits 56, 57, and 58 are connected to control cylinder 55 at different points spaced from each other in the longitudinal direction of the cylinder. Control cylinder 55 contains a piston 59 which is slidable therein under the action of the pressure medium supplied through a pressure fluid supplying inlet means I and against the action of a spring 60. Control piston 59 is preferably operated by the same pressure medium which is also applied to the pressure pad, and in such a manner that piston 59 shuts off the conduits 56, 57, and 58 until a short time before full pressure is applied to the pressure pad and against the sole. Piston 59 is then moved against the action of spring 60 and frees conduits 56, 57, and 58 to admit the pressure medium to the cylinders. When at the end of the cementing process the pressure is released from the pressure pad, this also automatically results in a release of the pressure in cylinder 55 so that spring 60 will then return piston 59 to its starting position at the left end of cylinder 55 so that the ports of conduits 56, 57, 58 are connected by the cylinder chamber on the right side of piston 59.

In the embodiment of Fig. 9, the three cylinders 3, 4, and 5 are supplied with the pressure medium from a common manifold 61 through conduits 62, 63, and 64, respectively. For releasing the pressure upon the shoe, a suction conduit (not shown) may also be connected to manifold 61. Underneath the pistons the cylinder chambers 65, 66, and 67 may also be provided with springs for lifting the pressure members 15, 16, and 17 from the lasted shoe in the direction shown by arrow 68 when the pressure in manifold 61 is reduced.

The various features of the different embodiments of the invention may also be combined with each other.

Also, instead of providing the cementing press with the usual means for raising and lowering the inflatable pressure pad so as to exert the necessary cementing pressure upon the sole of the shoe, while the back-pressure mechanism according to the invention is maintained in a stationary position, it is also possible to reverse the order and to modify the cementing press so that the pressure pad will be maintained in a stationary position and the back-pressure mechanism or its supporting arm 1 will be raised and lowered.

Although our invention has been illustrated and described with reference to the preferred embodiments thereof, we wish to have it understood that it is in no way limited to the details of such embodiments, but is capable of numerous modifications within the scope of the appended claims.

Having thus fully disclosed our invention, what we claim is:

1. A shoe press comprising means for pressing a sole against the lower side of a lasted shoe for cementing the same thereto, a plurality of pressure members to be applied at least to the upper side of said shoe and the last therein and at least at three different points thereof to counter the pressure to which said shoe is subjected by said sole pressing means, means for supporting said pressure members, means for guiding said pressure members so as to be movable in only one direction relative to the lasted shoe, means for transmitting a movement of each of said pressure members to the other pressure members when a pressure is applied to said sole by said first means for automatically controlling the position of said other pressure members in relation to the position of said first pressure member; at least two of said pressure members including end members pivotable about axes transverse to said one direction and adapted to engage the upper side of the last.

2. A shoe press as defined in claim 1, wherein at least one of said pressure members comprises two pressure elements adapted to act from two opposite lateral sides upon a shoe or the last therein, and means for automatically balancing the pressure exerted upon said shoe or last by one of said pressure elements relative to the pressure exerted by the other pressure element.

3. A shoe press as defined in claim 1, wherein said guiding means comprise a plurality of cylinders, a piston slidable in each of said cylinders, a piston rod on each of said pistons extending from one end of each cylinder and guided for movement in said cylinder in only one direction relative to said lasted shoe, one of said pressure members being mounted on the outer end of each of said piston rods, said transmitting means comprising conduits for connecting said cylinders with each other, and means for supplying a pressure medium to said cylinders.

4. A shoe press as defined in claim 3, comprising means for disconnecting said conduits from each other, said disconnecting means including a control cylinder connected to said pressure-medium supplying means, said conduits leading to each of said first cylinders connected to said control cylinder, a spring within said control cylinder, a piston slidable under the action of said pressure medium within said control cylinder against the action of said spring and movable to a position to shut off said conduits from said pressure medium and to another position in which said control cylinder connects said conduits.

5. A shoe press as defined in claim 3, wherein at least at one point of the shoe or the last therein, one of said pressure members includes two pressure elements so as to act upon two opposite lateral sides of said shoe or last.

6. A shoe press as defined in claim 3 further comprising another cylinder, a piston with a piston rod thereon slidable within said cylinder, a pressure member on the outer end of said piston rod and adapted to engage the heel of a shoe from the rear, and a conduit connecting said last cylinder to one of the first cylinders.

7. A shoe press as defined in claim 6, further comprising resilient means acting upon said last pressure member for automatically retracting the same from said heel when the pressure of said pressure medium in said conduits is reduced.

8. A shoe press as defined in claim 1, wherein said guiding means comprise a plurality of rods, and guiding elements for guiding said rods for movement in only one direction relative to said lasted shoe, one of said pressure members being mounted on the lower end of each of said rods, said transmitting means comprising a plurality of double-armed levers connecting the individual rods with each other, and means for pivotally supporting said levers.

9. A shoe press as defined in claim 8 comprising a guide member mounted on the lower end of each of said rods and extending substantially in the longitudinal direction of said shoe, and means near the upper end of each of said pressure members for securing said pressure members in different positions on said guide members, respectively.

10. A shoe press as defined in claim 8, wherein said guiding means mounted on said supporting means comprise three rods, each of said three rods carrying one of said pressure members, and a fourth rod slidably guided by said guiding elements for movement in the same direction as said first three rods, one of said double-armed levers being pivotably mounted at a point stationary on said supporting means and connecting one of said three rods with said fourth rod, and another lever of said double-armed levers being pivotably mounted on said fourth rod and connecting the second and third rods, the two outer ends of each of said levers being pivotably connected to the respective rods.

11. A shoe press as defined in claim 1, wherein said guiding means comprise a plurality of rods and guiding elements for guiding said rods for movement in only one direction relative to said lasted shoe, said transmitting means comprising a plurality of double-armed levers connecting the individual rods with each other, means for pivotally supporting said levers, one of said pressure members being mounted on the lower end of at least one of said rods and adapted to act upon said shoe or the last therein, and at least one of the other pressure members comprising two pressure elements adapted to act from two opposite lateral sides upon the shoe or the last therein, means for pivotably connecting said two pressure elements to each other, and means for pivotably connecting said last means to the lower end of at least one other of said rods.

12. A shoe press as defined in claim 11, wherein said last two connecting means comprise a supporting member mounted on the lower end of said last rod, a pair of rods spaced from each other and guided by said supporting member for movement in the same direction as said other rods, and a double-armed lever pivotably mounted on said supporting member, the two outer ends of said last lever being pivotably connected to said pair of rods.

13. A shoe press comprising, in combination, a first press means, and a second press means movable toward and away from said first press means; a member on one of said press means for pressing a sole against the lower side of a shoe mounted on a last for cementing the sole to the shoe; a supporting member secured to the other press means and adapted to extend in longitudinal direction of the shoe; at least three hydraulic operating means, each hydraulic operating means including a cylinder element, a pressure fluid in said cylinder element, and a piston element movable in said cylinder element, one of said elements of each hydraulic operating means being mounted on said supporting member, and the other element of each hydraulic operating means being movable toward and away from said one press means, said other elements being adapted to engage selected spaced points of the upper side of said shoe and last; and conduit means connecting said cylinder elements of said hydraulic operating means so that the pressure exerted by said other elements on said shoe and last is balanced.

14. A shoe press comprising, in combination, a first press means, and a second press means movable toward and away from said first press means; a member on one of said press means for pressing a sole against the lower side of a shoe mounted on a last for cementing the sole to the shoe; a supporting member secured to the other press means and having a guide way adapted to extend in longitudinal direction of the shoe; at least three hydraulic operating means, each hydraulic operating means including a cylinder element having an axis parallel to the direction of movement of said second press means, a pressure fluid in said cylinder element, and a piston element movable in said cylinder element, one of said elements of each hydraulic operating means being

mounted on said guide way for movement along the same relative to the other elements mounted on said guide way, and the other element of each hydraulic operating means being movable toward and away from said one press means, said other elements being adapted to engage selected spaced points of the upper side of said shoe and last; and conduit means connecting said cylinder elements of said hydraulic operating means so that the pressure exerted by said other elements on said shoe and last during movement of said second press means is balanced.

15. A shoe press as set forth in claim 13 wherein one of said hydraulic operating means includes two cylinder elements inclined to each other, and two piston elements respectively mounted in said two cylinder elements.

16. A shoe press comprising, in combination, a first press means, and a second press means movable toward and away from said first press means; a member on one of said press means for pressing a sole against the lower side of a shoe mounted on a last for cementing the sole to the shoe; a supporting member secured to the other press means and having a guide way adapted to extend in longitudinal direction of the shoe; at least three hydraulic operating means, each hydraulic operating means including a cylinder element, a pressure fluid in said cylinder element, and a piston element movable in said cylinder element, one of said elements of each hydraulic operating means being mounted on said guide way for movement along the same relative to the other elements mounted on said guide way, and the other element of each hydraulic operating means being movable toward and away from said one press means, said other elements being adapted to engage selected spaced points of the upper side of said shoe and last; a conduit means connected to each of said cylinder elements; and valve means connected to said conduit means for connecting the same and said cylinder elements to a source of pressure fluid, said valve means including a valve member movable to a first position in which said conduit means are connected to each other so that the pressure exerted by said other elements on said shoe and last is balanced,

and to a second position closing said conduit means so that movements of said other elements are blocked by said pressure fluid, said valve means including spring means for urging said valve member to one of said positions, said valve member moving to the other of said positions under the action of said pressure fluid.

17. A shoe press comprising, in combination, a first press means, and a second press means movable toward and away from said first press means; a member on one of said press means for pressing a sole against the lower side of a shoe mounted on a last for cementing the sole to the shoe; a supporting member secured to the other press means and having a guide way adapted to extend in longitudinal direction of the shoe; at least three hydraulic operating means, each hydraulic operating means including a cylinder element, a pressure fluid in said cylinder element, and a piston element movable in said cylinder element, one of said elements of each hydraulic operating means being mounted on said guide way for movement along the same relative to the other elements mounted on said guide way, and the other element of each hydraulic operating means being movable toward and away from said one press means, said other elements being adapted to engage selected spaced points of the upper side of said shoe and last; a conduit means connected to each of said cylinder elements; and valve means connected to said conduit means, said valve means including a valve member movable to a first position in which said conduit means are connected to each other so that the pressure exerted by said other elements on said shoe and last is balanced, and to a second position closing said conduit means so that movements of said other elements are blocked by said pressure fluid.

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