

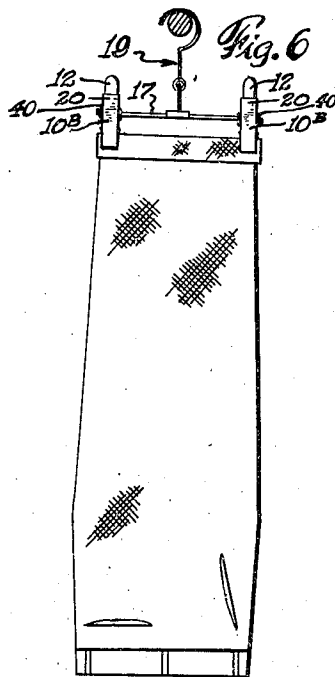
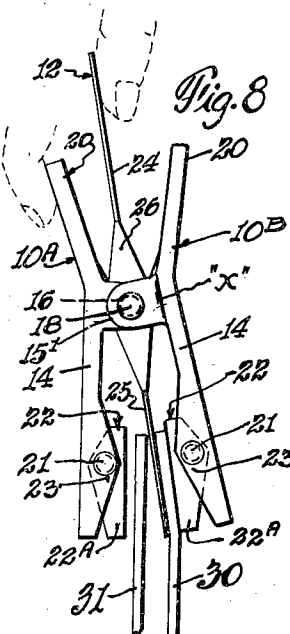
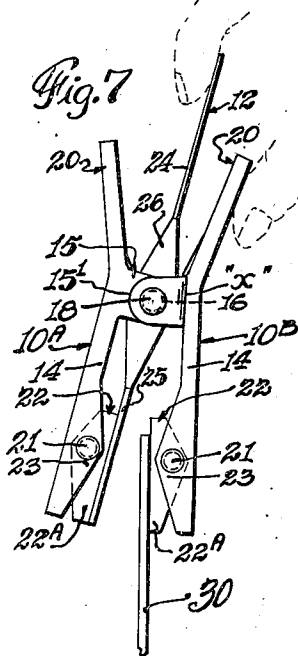
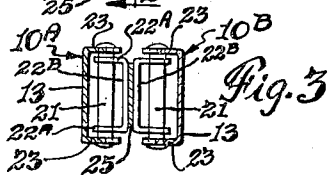
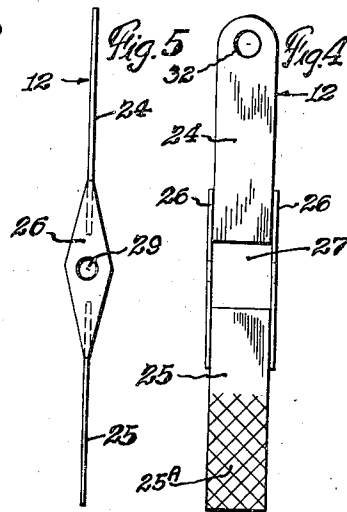
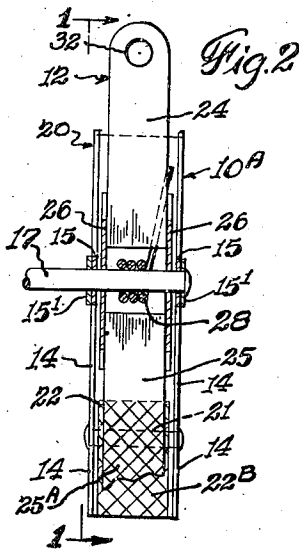
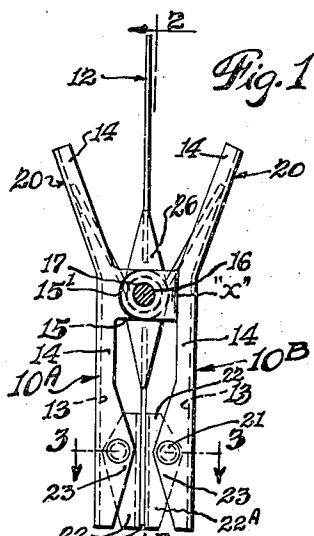
Sept. 27, 1949.

W. J. RYSICK
CLASPING MEANS FOR FRICTIONALLY
HOLDING ARTICLES IN SUSPENSION

2,483,303

Filed Nov. 27, 1946

2 Sheets-Sheet 1



INVENTOR.
Walter J. Rysick
Frank J. Schraeder Jr.
BY
ATTORNEY

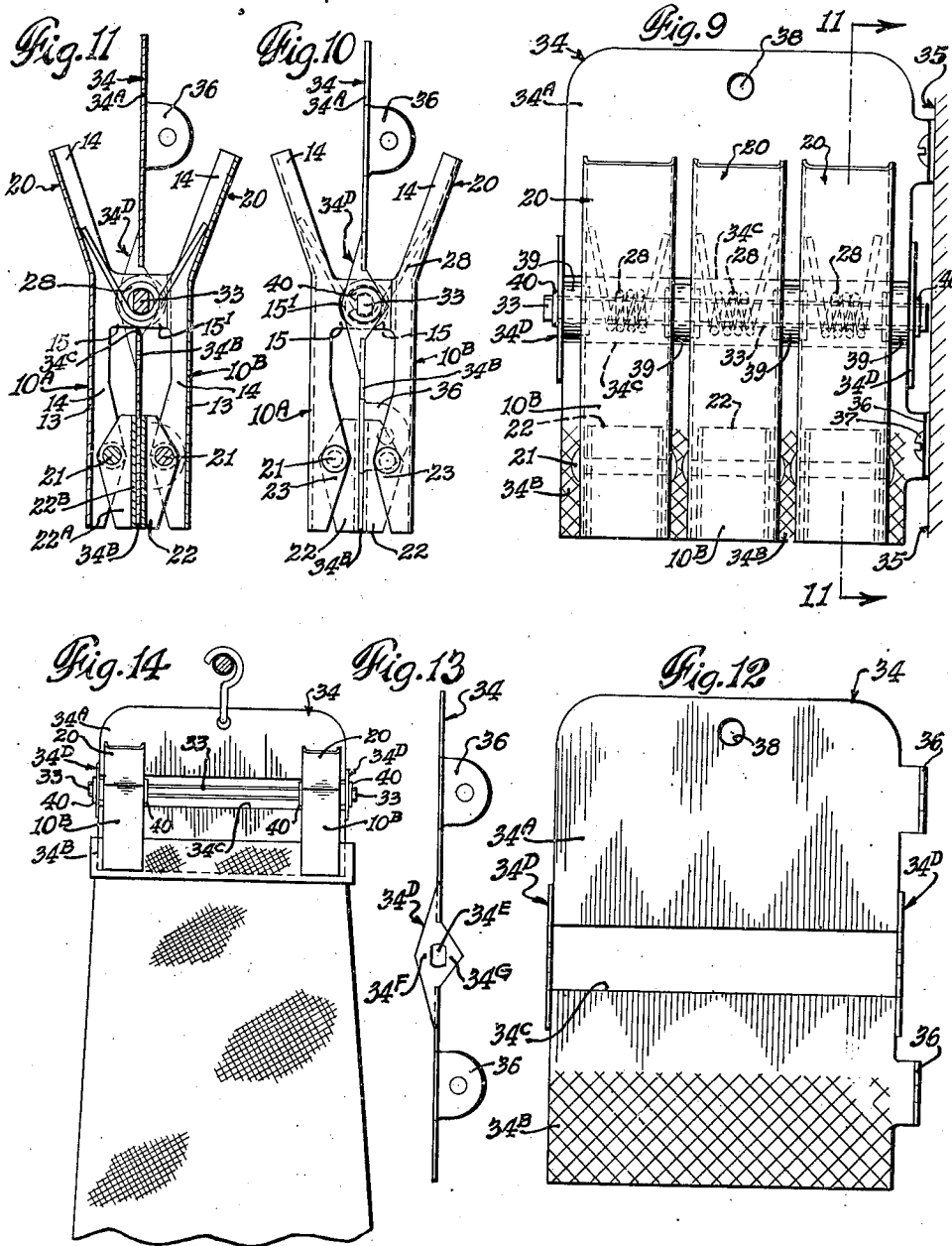
Sept. 27, 1949.

Filed Nov. 27, 1946

W. J. RYSICK
CLASPING MEANS FOR FRICTIONALLY
HOLDING ARTICLES IN SUSPENSION

2,483,303

2 Sheets-Sheet 2



INVENTOR.

Walter J. Rysick
BY *Frank J. Schneider Jr.*
ATTORNEY

UNITED STATES PATENT OFFICE

2,483,303

CLASPING MEANS FOR FRICTIONALLY
HOLDING ARTICLES IN SUSPENSION

Walter J. Rysick, Fort Wayne, Ind.

Application November 27, 1946, Serial No. 712,484

6 Claims. (Cl. 223—96)

1

My invention relates to clasp devices adapted for frictionally engaging and retaining various articles and has among its objects to provide a novel clasp device for compactly frictionally holding in suspended position one, or two or more articles in adjacent positions but permitting selective release of any one of the articles from the device without releasing the other articles held in suspended position thereby.

Another object of my invention resides in the provision of a clasp device which is spring-actuated and adapted to successively receive and frictionally retain for suspension thereby two articles and either of which articles may selectively be removed from the device without releasing the frictional retainment of the other article while both of the articles are frictionally retained through pressure applied by a single spring.

Another feature of my invention is found in the adaptability of my improved clasp device for individual use or for multiple mounting on a common supporting hanger whereby one or more articles may be frictionally engaged by one or more of the clasp devices for retainment thereby in suspended position from the hanger; each device permitting the selective withdrawal therefrom of any selected one of the articles without releasing any other article or articles from their frictional engagement by the devices.

Still another object of my invention is found in the provision of a clasp device comprising three operatively associated adjacently disposed article-clasp members coaxially pivotally mounted on a common pivot member; the clasp members having preferably plane-aligned article-clasp ends and being provided with a single spring disposed within an opening in the intermediate or central one of said clasp members having article-gripping faces on its sides opposed to the gripping faces of the outer two of the clasp members; the clasp ends of the outer two of the clasp members being urged by the single spring toward one another and toward the opposite article-gripping faces of the intermediate one of said members and, to facilitate the successive spreading apart of the article-clasp end of first, one of the outer members and that of the intermediate member and, thereafter, the clasp end of the other one of the outer members and that of the intermediate member, the outer members are provided with arm-like extensions disposed slightly angularly outwardly relatively to each other and the intermediate one of the members being extended

2

upwardly substantially beyond the ends of arm-like extensions of the outer members.

Still another object of my invention is to provide a clasp device comprising three operatively associated adjacently disposed article-clasp members coaxially pivotally mounted on a common pivot member and having plane-aligned article-clasp ends and each outer member having an article-gripping jaw pivotally mounted thereon; the pivoted jaws having article-gripping faces adapted for plane-alignment with the opposite article-gripping faces of the intermediate one of the clasp members respectively of the angular positions of the outer clasp members relatively to the intermediate clasp member.

The various features of novelty whereby the present invention is characterized will hereinafter be pointed out with particularity in the appended claims; but for a full understanding of the invention and its various objects and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawings showing preferred embodiments of the invention.

In the drawings wherein like reference numerals indicate like or corresponding parts:

Fig. 1 is a side elevation of an article-clasp device embodying my invention as viewed from line 1—1 of Fig. 2, the pivot member for the clasp members being shown in cross-section;

Fig. 2 is a vertical section taken on line 2—2 of Fig. 1;

Fig. 3 is a horizontal section taken on line 3—3 of Fig. 1;

Fig. 4 is a face view of the central one of the clasp members;

Fig. 5 is an edge view of the central one of the clasp members;

Fig. 6 illustrates the mounting of a plurality of spaced pairs of the improved clasp devices on a common hanger;

Figs. 7 and 8 illustrate the manner of successively frictionally engaging a pair of articles by a single clasp device embodying my invention and illustrated in Figs. 1 to 6, inclusive;

Fig. 9 illustrates a side view of a modification of my invention as adapted to a necktie or other article hanger device having a single intermediate member cooperating with a plurality of outer clasp members disposed on opposite sides of the intermediate member;

Fig. 10 is an end view of the hanger device shown in Fig. 9;

3

Fig. 11 is a vertical section taken on line 11—11 of Fig. 9;

Fig. 12 is a side view of the intermediate member shown in Figs. 9, 10 and 11;

Fig. 13 is an end view of the intermediate member;

Fig. 14 is a side elevation of a hanger device of the form shown in Figs. 9 to 11 inclusive but showing one (or two) pair of clasp members in relatively laterally spaced positions for adapting the device for suspending therefrom one or two pair of men's trousers; and

Fig. 15 shows a side view of one of the snap rings employed in retaining the outer clasp members in the desired positions on the supporting rod.

My improved clasp device is adapted for many uses and purposes where various articles are desired to be removably held in suspension such as, for example, necktie racks, hangers for pairs of men's trousers, and hangers for photographic films and prints during drying. The devices are also adaptable for holding various articles in suspension within chemical baths or solutions during treatment by various chemical processes as the clasp members may be made from various materials such as metal, wood or plastics.

As illustrated in Figs. 1 to 8 inclusive of the drawings, the improved device consists of two similar outer clasp members, generally designated by numerals 10^A and 10^B, and an intermediate or centrally disposed clasp member designated by numeral 12 all made of any suitable material and the outer members preferably being channel-shaped in cross-section to increase their rigidity, as more clearly shown in Fig. 3.

Each of the outer clasp members 10^A and 10^B is preferably formed with a flat side wall 13 having right-angularly bent flanges 14 which are formed, intermediate their lengths, with integral parallelly aligned ears 15 and 15¹ perforated with circular openings 16 through which extends the pivotal member such as the rod 17 of circular cross-section as shown in Figs. 2 and 6, or the pivotal member such as the rivet 18 shown in Figs. 7 and 8. The rivet 18 is employed for complete individual clasps and where multiple clasps are mounted on a common hanger 19, such as shown in Fig. 6, the single bar or rod 17 is employed.

The pair of ears 15¹ on the outer member 10^B may be slightly offset outwardly, as indicated at "X" in Figs. 1, 7 and 8, to permit same to overlap the ears 15 of the outer member 10^A.

The upper end portion 20 of each outer clasp member is preferably bent angularly from, and outwardly beyond, the pivotal ears to facilitate spreading apart of the article-gripping jaws of the assembled device and the lower end portions of the flanges 14 are preferably slightly widened, as at 23, to increase the widths of the flanges for reception therethrough of a pivotal pin or rivet 21 for pivotal support thereon of a U-shaped article-gripping jaw 22; the jaw flanges 22^A being perforated for free pivotal movement about the shank of the rivet 21 and being bent right-angularly relatively to the article-gripping face 22^B which is preferably checkered or otherwise serrated to increase its frictional grip.

As shown in Figs. 1 to 8 inclusive, the intermediate or centrally disposed clasp member 12 consists of two vertically spaced plane-aligned sections, namely, an upper arm section 24 and a lower article-gripping section 25; the two sec-

tions being of flat material and held together in relatively spaced apart positions by suitably shaped side plates 26 disposed right-angularly to the flat sections and secured to the opposite side edges thereof in any suitable manner as by welding.

The side plates 26 being provided with laterally aligned openings 29 for passage therethrough of the pivot rod 17 (or rivet 18) whereby the intermediate clasp member 12 is pivotally supported on such rod 17 (or rivet 18) as are the two outer clasp members 10^A and 10^B; the maximum width of the intermediate member 12 in the construction shown in Figs. 1 to 3 inclusive being preferably less than the distance between the inner faces of flanges 14.

In order to simplify the construction and reduce the cost of the clasp device by the use of a single pressure-exerting coil spring 28, the intermediate clasp member 12 is provided with the opening 27 between the spaced opposed ends of the upper section 24 and the lower section 25 in which the coil spring 28 wound about the pivot rod 17 (or rivet 18) is disposed and so mounted that one end thereof is in engagement with the inner face of one of the arm-like extensions 20 and the other end thereof in engagement with the inner face of the other of the arm-like extensions 20 whereby the pivoted jaws 22 are constantly yieldingly urged by the spring 28 toward each other and consequently toward the opposite faces of the article-gripping section 25 of the intermediate clasp member; the opposite face of the section 25 preferably being checkered or otherwise serrated at the gripping ends as at 25^A.

The length of the intermediate clasp member 12 being greater than the length of either one of the two outer clasp members 10^A and 10^B to provide for the outward projection of the upper end of the arm section 24 beyond the upper ends of the arm-like extensions 20 of the outer clasp members to thereby facilitate the alternate engagement thereof with first one and then the other of the outer clasp members by the fingers of the user for simultaneously oscillating the article-gripping lower end of one of the outer members together with the intermediate member apart and away from the article-gripping lower end of the other of the outer members to permit insertion therebetween of an article to be clasped thereby and thereafter simultaneously oscillating the article-gripping lower end of the other of the outer members together with the intermediate member away from the first said one of the members to thereby permit insertion therebetween of a second article for clasp engagement by the device.

The successive insertions of two articles, designated by numerals 30 and 31, for gripping engagement by one of my improved clasp devices is illustrated in Figs. 7 and 8. Obviously, either one of the articles 30 or 31 may be selectively quickly removed from the device without releasing the other article therefrom.

Fig. 6 illustrates a hanger provided with two of the improved clasp devices shown in Figs. 1 and 2 mounted on the single rod 17 and adapted to hold in suspension two pair of men's trousers; the rod 17 being provided with a suitable hook 19 whereby the hanger may be suspended from a supporting rod, as shown in Fig. 6.

To permit convenient individual use, each device may be provided with a hole 32 in the upper end of the intermediate member 12 whereby the device may be suspended from rigid bar, nail or the like.

5

The modification of my invention shown in Figs. 9 to 13 inclusive illustrates an adaptation of my invention to a novel article-suspending device such as, for example, a necktie rack and also shows certain novel features of construction which are adaptable to the devices illustrated in Figs. 1 to 8 inclusive.

The article-suspending device shown in Figs. 9 to 13 inclusive consists of a plurality of pairs of clasp members 10^A and 10^B mounted on a single rod 33 of preferably non-circular cross-section carried on a single unitary intermediate clasp member, generally designated by numeral 34, which cooperates with the clasp members 10^A at one side thereof and also with the clasp members 10^B at the opposite side thereof.

The unitary intermediate clasp member 34 consists of a flat plate portion having a lateral opening 34^C extending from opposite ends thereof and dividing same into an upper section 34^A and a lower section 34^B.

The upper and lower sections of the intermediate clasp member are formed with integral connecting portions, generally designated by numeral 34^D, which bridge the opening 34^C, integrally connect and stiffen the sections 34^A and 34^B, and also function as end supports for the rod 33.

The connecting portions 34^D are provided with laterally aligned openings 34^E the vertical center lines of which pass midway between the opposite faces of the upper and lower plane-aligned plate sections 34^A and 34^B and the horizontal center line of which openings 34^E passes midway between the spaced edges of the upper and lower plate sections which define the lateral sides of the opening 34^C.

The configuration of the connecting portions 34^D formed integrally with opposite ends of the member 34 may be of any suitable shape. The particular shape shown more clearly in Fig. 13 may be described as consisting of integral triangular portions 34^F and 34^G.

The connecting portions 34^D being an integral part of the plate 34 are shaped during die-stamping operation and then are bent right-angulary to the plane of the upper and lower plate sections; the right-hand portions 34^G being stamped from that portion of the plate which is removed to provide the lateral opening 34^C and left-hand portions 34^F being die-cut during the stamping operation from opposite side portions of the plate 34 and then bent right-angulary to the plane of the plate 34 into plane alignment with the portions 34^G; the construction of the unitary finished plate member which constitutes the intermediate clasp member being more clearly shown in Figs. 12 and 13.

The intermediate member 34 may be provided with means for rigidly securing the device as to the face 35 of a wall or other support by providing the upper and lower sections with integral right-angulary bent perforated ears 36 whereby the device may be secured to the face 35 of the support as by screws 37, or the device may be suspended from any suitable overhead support by means of screws or the like passed through the opening 38.

In the modifications shown in Figs. 9 to 15 inclusive, I have preferably shown the rod 33 of non-circular cross-section and have accordingly provided the openings 34^E in the connecting portions 34^D of corresponding configuration so that the rod 33 is not rotatably movable relatively to

6

the intermediate clasp member 34 and vice versa. The use of this construction in the clasp devices shown in Figs. 1 to 8 inclusive will permit and insure retainment of the intermediate clasp member 12 in vertical position while the clasp members 10^A and 10^B are moved relatively thereto in their pivotal movements about the rod 17 or rivet 18 as the ears 15 and 15¹ have circular openings 16.

A rod 33 of any suitable non-circular cross-section with corresponding openings 34^E in the connecting portions 34^D will provide the desired connection between the rod 33 and the intermediate member 34; the rod 33 could, for example, have a flattened longitudinally extending face portion, or could have a pair of opposed longitudinally extending face portions 33^A as shown in Fig. 11 but more clearly in Fig. 15.

As shown in Figs. 9, 10 and 11, the single laterally extended intermediate clasp member 34 cooperates with the plurality of pairs of clasp members 10^A and 10^B which are mounted on rod 33 for pivotal movements thereon; the ears 15 and 15¹ of the members 10^A and 10^B embracing the rod 33 in their circular perforations 16, similarly as in Figs. 1, 2, 7 and 8, to permit free pivotal movement on the rod 33 of non-circular cross-section.

Suitable round washers 39 are mounted on the rod 33 between the pairs of clasp members 10^A and 10^B to retain same in desired longitudinally spaced positions on the rod 33 and the outer ends of the rod 33 are preferably provided with snap rings 40 to retain the rod against longitudinal displacement.

The device illustrated in Figs. 9 to 13 inclusive shows three pairs of clasp members but it is obvious that the intermediate member 34 can be readily made in any desired horizontal length to accommodate many more pairs of clasp members and that both of the opposite ends of an elongated intermediate member 34 may be provided with supporting ears 36 for rigid mounting of the device between spaced supports.

The device shown in Figs. 9 to 13 inclusive may be conveniently used as a men's necktie support wherein one necktie may be securely clasped between each of the clasp members 10^A and 10^B and the intermediate member 34 and each necktie may be conveniently selectively removed without displacing any of the other neckties from the rack.

The device shown in Figs. 9 to 13 may also be used for purposes such as, for example, a rack for displaying merchandise in retail stores or as a drying rack for stockings and lingerie and the pairs of clasp members 10^A and 10^B may be suitably mounted on the rod 33 in desired longitudinally spaced apart positions thereon by employed washers 39 of required length or by manufacturing the rod 33 with suitably spaced transverse notches to receive the retaining snap rings 40 as illustrated in Fig. 15. An example of such spaced pairs of clasp members 10^A and 10^B mounted in spaced apart positions on the single rod 33, and each clasp member retained on the rod 33 against longitudinal movement thereon by means of a snap ring 40, is illustrated in Fig. 14 which shows a hanger for men's trousers consisting of a single intermediate clasp member 34 cooperating with two sets of spaced clasp members pivotally mounted on rod 33; each clasp member being pivotally mounted on rod 33 between a snap ring 40 on one side thereof and a washer 39 on the opposite side thereof adjacent to the inner face of the connection portion 34^D

and preferably another snap ring 40 on the rod 33 adjacent the outer face of the connection portion 34^D.

Various changes and modifications may be made in the details of construction and arrangements shown in the embodiments of my invention as preferably herein exemplified in the attached drawings without departing from the spirit of my invention defined in the hereto appended claims.

I claim:

1. A clasp device of the character described comprising a pair of outer clasp members of channel-shaped cross-section having relatively oppositely angularly bent integral upper arm portions and plane-aligned lower ends, each outer clasp member having, intermediate its ends, a pair of integral perforated ears, the pair of ears of one of said outer members overlapping the pair of ears of the other one of said outer members to thereby horizontally align the perforations of all of said ears; a pivot member extending through all of said perforations; a pair of laterally aligned article-gripping jaws of U-shaped cross-section having flanges pivotally mounted on pivot pins extending through opposed sides of the lower portions of said outer clasp members and through the opposed flanges of said jaws, said jaws having adjacently disposed opposed article-gripping faces and through their free pivotal adjustment about said pivot pin being adapted to present said article-gripping faces in vertical plane alignment irrespectively of the relative angular positions of said pair of outer clasp members; a third clasp member disposed centrally between said outer clasp members and comprising a pair of vertically spaced flat plates providing an opening between their adjacent ends, the upper one of said plates constituting an operating arm extending beyond the ends of said arm portions of said outer clasp members and the lower one of said plates having article-gripping faces on opposite sides thereof adapted for face engagement by the article-gripping faces of said jaws, said spaced plates being connected together along opposite edges thereof by side pivot plates having horizontally aligned perforations through which said pivot member extends whereby said third clasp member is alternately pivotally oscillatable with either one of said outer clasp members to afford successive insertions of articles for gripping engagement thereby, first, between one article-gripping face of said third clasp member and one of said jaws and thereafter between the opposite gripping face of said third clasp member and the other one of said jaws; and a coil spring disposed within said opening between said spaced plates of said third clasp member through the convolutions of which spring said pivot member extends, the ends of said spring yieldingly exerting pressure against the arm portions of said outer clasp members thereby yieldingly urging said jaws toward the oppositely disposed article-gripping faces of said third clasp member.

2. A clasp device of the character described comprising a plurality of pairs of oppositely disposed outer clasp members, each oppositely disposed pair of said members having relatively oppositely angularly bent upper arm portions, each outer clasp member having, intermediate its ends, a pair of perforated ears, the pair of ears of each one of said outer clasp members overlapping the pair of ears of an oppositely disposed one of clasp members to thereby horizontally

align the perforations of all of said ears, a pivot rod extending through the perforations of all of said ears; a pair of laterally-aligned article-gripping jaws pivotally mounted on the lower portions of each of said outer clasp members having free pivotal adjustment to present their article-gripping faces in vertical alignment within their range of pivotal movement irrespectively of the relative angular positions of said pair of outer clasp members; an intermediate clasp member disposed between said pairs of outer clasp members and carrying said pivot member, said intermediate member having an opening intersected by the longitudinal axis of said pivot member; and coil springs wound about said pivot member, disposed within said opening of said intermediate clasp member, and having ends yieldingly exerting pressure against the arm portions of opposed pairs of said outer clasp members thereby yieldingly urging said jaws toward said intermediate member.

3. A clasp device adapted to frictionally hold a plurality of articles in suspension comprising a plurality of opposed pairs of outer clasp members, a single unitary intermediate clasp member positioned between said pairs of opposed outer members, said pairs of outer members being coaxially oscillatably mounted on a common pivot member carried on said intermediate member, said intermediate member having an opening therein intersected by said pivot member, the lower ends of said outer members being horizontally aligned and each carrying article-engaging means pivotally mounted at the lower ends thereof, and a single spring for each pair of said outer members mounted on said pivot members within the plane of said opening of said intermediate member and having ends in pressure-exerting contact with oppositely positioned portions of a pair of said outer members above said pivot member whereby the article-engaging means are yieldingly urged toward said intermediate member.

4. In a spring-actuated article-clasp device comprising a plurality of opposed pairs of horizontally aligned article-clasp members all pivotally interconnected intermediate their ends by a single horizontally disposed pivot member, and a single spring for each pair of opposed clasp members having ends in engagement with said opposed pair of clasp members whereby adjacent lower ends of each pair of opposed clasp members are yieldingly urged toward one another; means providing for independently clasp a plurality of articles by the device and permitting independent removal of same comprising a third member disposed between said opposed pairs of said article-clasp members coaxially pivotally mounted with said pair of members, and movable alternately with either one of said pair of opposed members and then with the other one of said pair of opposed members.

5. A device adapted to clasp a plurality of articles and frictionally retain same in suspended position therefrom, comprising at least two pair of oppositely disposed article-clasp members, a single rod of non-circular cross-section, means intermediate the ends of said clasp members for pivotally supporting the latter on said rod for independent oscillation thereon, an intermediate member extending between pairs of said opposed clasp members including angularly bent integral portions at opposite ends thereof having aligned perforations of configuration corresponding to the non-circular cross-section of said rod

9

for supporting said rod therein, a single spring for each pair of opposed clasping members carried on said rod and having opposite ends in engagement with opposed clasping members, said intermediate member having a laterally extending opening, said rod extending laterally of and through said opening with its axis within and parallel to the plane of said opening, and said spring having a portion intermediate its ends supported on said rod within the plane of said opening.

6. A clasping device comprising two elongated outer clasping members each having at intermediate points in its long edges ears that overlap corresponding ears on the other of such members, a third, longer, clasping member in the form of a flat plate interposed between said outer members and having at intermediate points in its long edges ears that overlap corresponding ears on the outer members, said third member having therein an opening that extends across the same from ear to ear, a rod extending through all of said ears to secure the clasping members together,

10

at least the two outer members being loose on the rod so as to be movable angularly of the latter, and a torsion spring surrounding the rod within said opening and having its ends engaged with said outer clasping members so as yieldingly to hold each of them in clasping relation to said third member, and means on the lower ends of the outer clamping members cooperating directly with said plate to clamp articles against the plate.

WALTER J. RYSICK.

REFERENCES CITED

15 The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,105,018	Bluhm -----	July 28, 1914
20 1,876,139	Feldman -----	Sept. 6, 1932
2,226,789	Tupy -----	Dec. 31, 1940
2,408,145	Johnson -----	Sept. 24, 1946