Aug. 14, 1956 E. H. SCHMIDT 2,758,798

TOOL CASES OR KITS

Filed Oct. 5, 1951 3 Sheets-Sheet 1

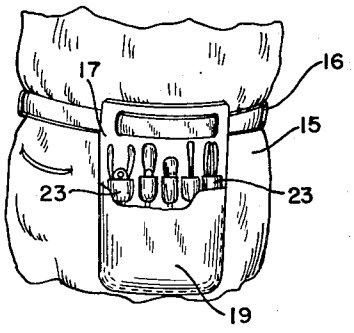


FIG. — 1

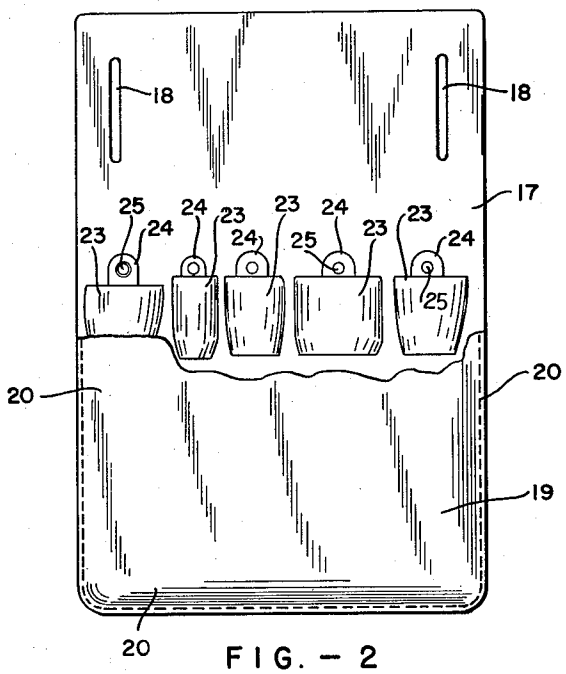


FIG. — 2

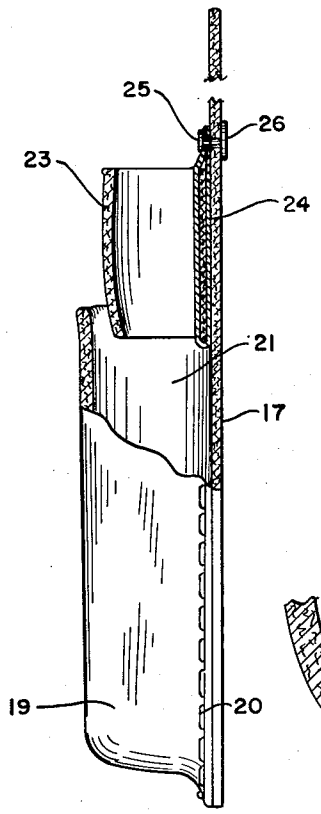


FIG. — 3

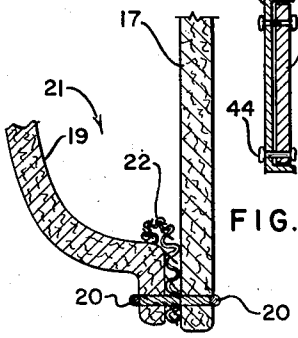


FIG. — 4

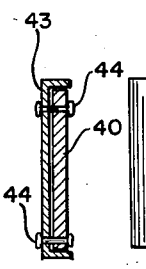


FIG. — 13

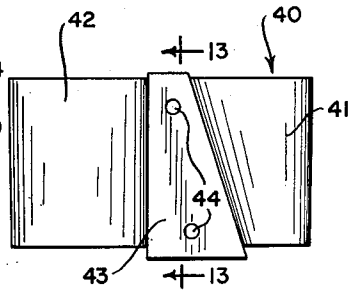


FIG. — 12

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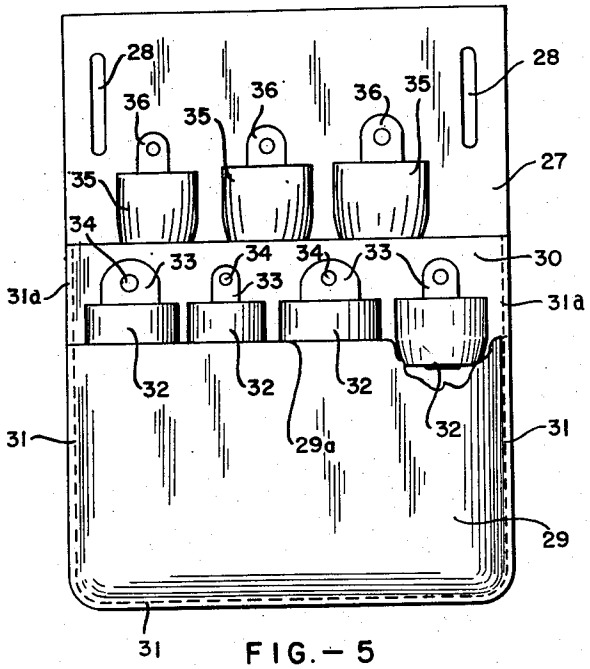


FIG.—5

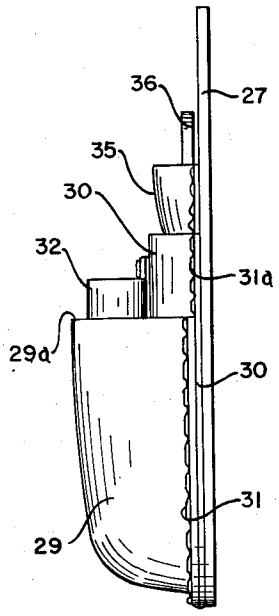


FIG.—6

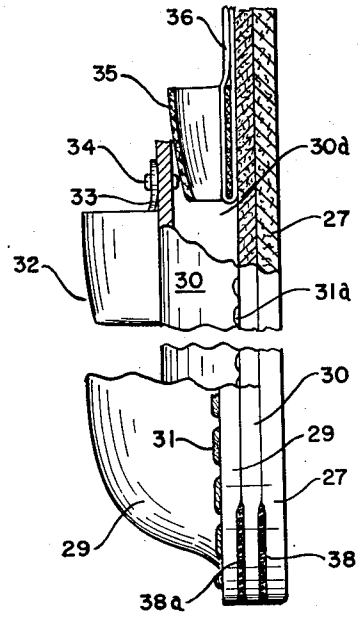


FIG.—7

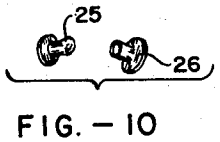


FIG.—10

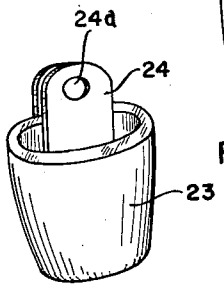


FIG.—8

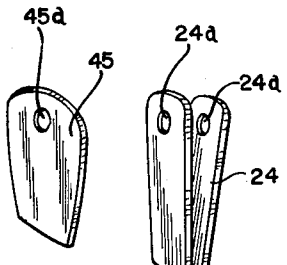


FIG.—11

FIG.—9

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TOOL CASES OR KITS

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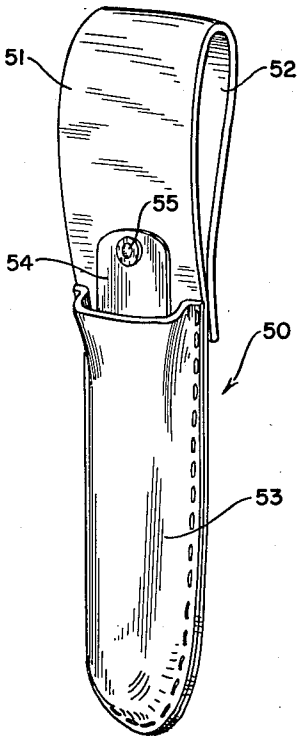


FIG. — 15

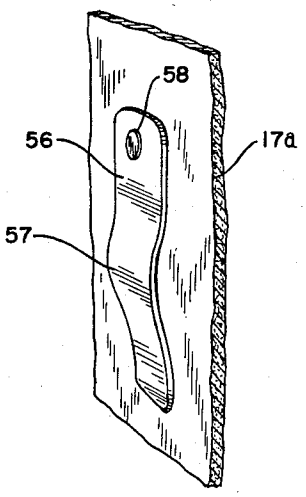


FIG. — 16

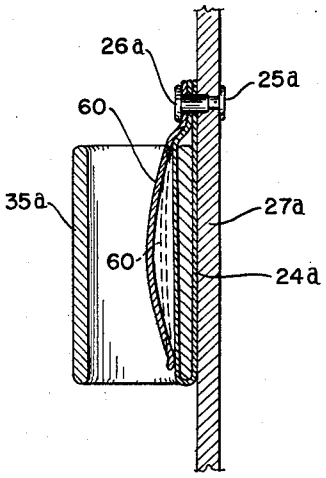


FIG. — 17

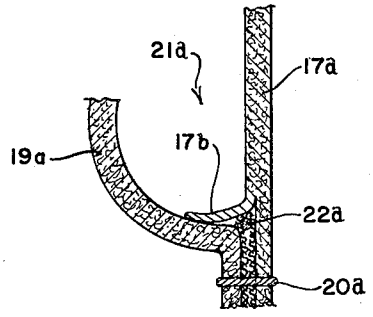


FIG. — 14

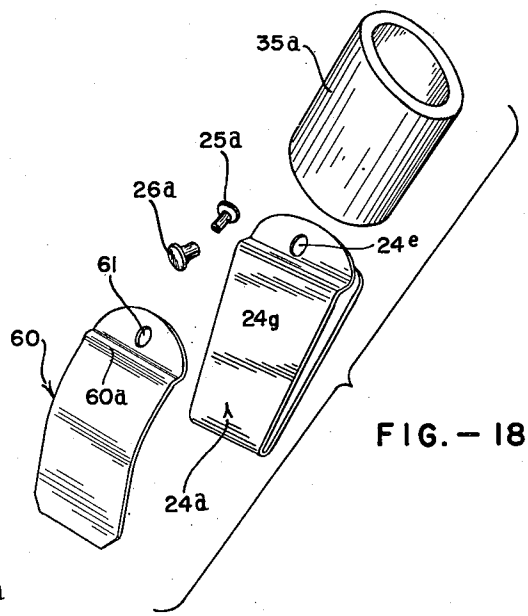


FIG. — 18

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United States Patent Office 2,758,798 Patented Aug. 14, 1956

2,758,798

TOOL CASES OR KITS

Earl H. Schmidt, Denver, Colo.

Application October 5, 1951, Serial No. 249,834

1 Claim. (Cl. 224—26)

The present invention relates to tool cases or kits. It has to do particularly, although not exclusively, with tool cases or kits which are adapted to be supported by and suspended from the apparel belt of a workman, such as a telephone linesman, or repairman. In fact, the kit of the present invention is adapted for use by various types of service men or repair men who, because of the particular kind of work in which they are engaged, must necessarily carry large quantities of small hand tools from job to job.

Various types of such previously known tool cases or kits have been formed of various materials, usually leather, but most of them have been unsatisfactory for use over long periods of time for the reason that the constant removal and particularly the reinsertion or replacement of the various tools, including screw drivers, chisels, knives, etc., into the tool case or kit, would cut or otherwise damage or sever the stitching which held the parts of the kit together, allowing the relatively sharp end of the tool to project downward or outward beyond the bottom of the kit. Often these protruding ends would contact objects and damage them. One particular objection to the previouly known kinds of tool kits resulted from the damage done to the upholstery and other interior trim of motor vehicles operated by the maintenance men while they were entering and leaving the vehicles at the various job locations. Often the sharp end of a tool would be exposed without the knowledge of the serviceman and because of it, damage would be done before the wearer of the kit discovered the damaged condition of said kit.

It is an important object of the present invention to provide a new and improved tool case or kit in which the stitching which serves to hold the component parts of the case or kit together cannot be cut or otherwise damaged by the tools carried in the case.

Another object of the present invention is to provide an improved tool case or kit having separate socket-like means for supporting individual tooks in the kit, in which these socket-like means are removable and interchangeable at the will of the user of the kit.

A further object of the present invention is to provide a kit as aforesaid in which several pockets and several series of socket-like members for receiving individual tools are provided.

A further object of the present invention is to provide improved means for permitting the quick attachment of the socket-like members to the tool case or kit and likewise the easy removal of said members.

A further object of the present invention is to provide a new and improved tool case or kit which is of relatively simple structure, which has long lasting qualities, and which provides handy means for receiving and supporting tools of various kinds so as to adapt the case or kit for use by workmen engaged in various endeavours, wherein various different types of tools may be required in accordance with the particular job of the workman; another object being to provide means for receiving a

tool or tools and frictionally or otherwise holding them in place against accidental release regardless of the position of the tool case or kit, even when it is inverted.

The foregoing and other objects and advantages of the present invention will be apparent from the following description and appended claim when considered in connection with the accompanying drawings forming a part of this specification, wherein like reference characters designate corresponding parts in the several views.

In said drawings:

Fig. 1 is a front elevational view of one form of improved tool case or kit embodying the invention, shown carried by and supported from the belt of a workman, a portion only of whose body is illustrated;

Fig. 2 is a front elevational view, partly broken away, of the tool case or kit of Fig. 1;

Fig. 3 is an edge elevational view of the case or kit of Fig. 2, being shown partly broken away and partly in section to reveal the relationship of the parts.

Fig. 4 is an enlarged fragmentary detail vertical sectional view illustrating means for protecting the stitching for holding together the component parts of the tool case or kit of the preceding views.

Fig. 5 is a front elevational view of a somewhat modified form of tool case or kit embodying the present invention;

Fig. 6 is an edge elevational view of the case or kit of Fig. 5;

Fig. 7 is a fragmentary edge elevational view of the case or kit of Figs. 5 and 6, parts being broken away, and other parts shown in section for the purpose of revealing the relationship of said parts;

Fig. 8 is a perspective view of one of the socket-like members of the kit for receiving individual tools, shown in association with improved clip means for attaching the socket-like member to a surface or portion of the kit;

Fig. 9 is a perspective view of the clip-member shown in Fig. 8;

Fig. 10 is a perspective view of one of the stud and socket fastening devices or members employed for attaching or securing the clip and socket-like tool-receiving and supporting member in the case or kit;

Fig. 11 is a perspective view of a somewhat modified form of a clip member employed for attaching strips of material to a surface of the case or kit to form individual socket-like tool receiving portions in the strips;

Fig. 12 is a front elevational view of two socket-like members formed from a single piece of material and adapted to be held in place upon a surface of the tool case or kit and separated by a further modified form of clip member embodying the present invention;

Fig. 13 is a vertical sectional view through the clip and material of Fig. 12, taken substantially along the line 13—13 of Fig. 12, looking in the direction of the arrows;

Fig. 14 is a view similar to Fig. 4, showing another manner in which the stitching may be protected against damage;

Fig. 15 is a perspective view of a separate or independent socket for a single tool, such as a pair of "snips" or pliers (not shown) adapted to be supported by the belt of the workman, or attached to a portion of his kit, which frictionally holds the tool in place regardless of the position which the workman assumes with the consequent tilting or shifting of position of the socket.

Fig. 16 is a fragmentary perspective view of a single pre-shaped friction-applying means for a tool adapted to be held in the kit of the preceding views.

Fig. 17 is a fragmentary vertical sectional view of a somewhat modified form of socket-like member having friction means for retaining a tool (not shown) in the socket member;

Fig. 18 is an exploded view, in perspective, of the clip and tool-retaining means of Fig. 17.

Before explaining in detail the present invention it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. It is to be understood also that the phraseology or terminology employed herein is for the purpose of description and not of limitation, and it is not intended to limit the invention claimed herein beyond the requirements of the prior art.

With particular reference to Figs. 1, 2, 3 and 4 of the drawings, there is shown in these views one form of improved tool case or kit embodying the present invention. In Fig. 1, a portion of the body of a workman is indicated at **15**, said workman having the usual apparel belt **16** about his waist which is used to support the tool case or kit of the present invention. As shown, the tool kit of the present form of the invention is preferably formed from two contiguous layers or pieces of material, such as leather, or the like, comprising an inner layer or body member **17** having belt-receiving slots **18** formed therein and an outer layer or piece of material **19** which is of somewhat smaller size than the body member or inner piece **17**. The outer surface or piece **19** of the case or kit is stitched along its bottom edge and along its two upright side edges to the inner surface or piece **17**, by means of a row of stitching indicated at **20**. Thus, the two attached pieces or surfaces of material **17** and **19** provide a pocket **21** (see particularly Figs. 3 and 4).

As stated above, previously known tool cases or kits have all had the disadvantage that the stitching for securing the component parts of the kit together has been cut and damaged so as to allow the lower end portions of tools carried by the kit to protrude through the bottom of said kit. This condition not only presented danger from the standpoint of possible contact with humans, but also presented a damaging condition because of the likelihood of the exposed sharp end portions of the tools coming into contact with objects which could be damaged by them. This damage to the stitching was due, of course, to the fact that the stitching was exposed or unprotected and after a short time by the constant replacing of tool in the kit, the sharp ends of those tools would penetrate between the inner and outer layers or surfaces of the kit and come into contact directly with the stitching and cut or damage it. In accordance with my present invention I prevent any such occurrence or damage by virtue of the fact that I provide protective means between the adjacent surfaces of the lower end of body member **17** and the lower end of the outer member **19**. In this connection, I preferably place a strip of heavy cord, rubber, plastic, or some other suitable material **22** between the adjacent surfaces of the members **17** and **19** before the stitching **20** is applied to hold the members together. This stitching **20** penetrates the material **22** as clearly seen in Fig. 4 of the drawing, and holds it firmly in place, with the bulk of the material protruding or projecting above the stitching and being disposed at the juncture of the adjacent portions of the members **17** and **19**. Thus, the bulk or major portion of the reinforcing material **22** projects into the pocket or space **21** and is in a position to be engaged by the lower end portions of tools as they are inserted into the case or kit.

For the purpose of guiding the various tools into position to be supported in the case or kit, and for holding them separated or segregated from one another, I have provided a series of socket-like members which may be of different size, shape, and conformation, and which are preferably detachably mounted upon the backing member or layer **17**. One such socket-like member **23**

is shown separated from the kit in Fig. 8. The clip-like means, shown as a whole at **24**, is illustrated separately in Fig. 9 of the drawing, whereas the fastening means or device for attaching the clip and its supported socket-like member **23** upon a portion or layer of the kit is shown in Fig. 10 of the drawings. This fastening device, as shown, comprises a male member **25** and a socket or female member **26**. The parts are placed together and then by the application of a tap with a hammer they are telescoped together and flattened out to hold the clip-member **24** in position on the layer **17** of the case or kit, as clearly shown in Fig. 3 of the drawings.

The clip-like member **24** is substantially V-shaped, the legs of the V each having an opening **24***a* formed therein for the purpose of receiving the members **25** and **26** of the fastener. In use, the socket-like member **23** is slipped into position between the legs of the clip **24** and the assembled parts located on the layer **17** in the position desired. A hole is then punched through the material of the backing plate **17** and the parts **25** and **26** of the rivet-like fastener are assembled and flattened, as stated above. As illustrated in Fig. 2 of the drawings, these socket-like members **23** may vary in size and shape and in that particular view, five such sockets are provided, each with its respective clip member **24** and fastening device **25**, **26**. It is merely necessary to pierce the material of the member **17** and to align the holes or openings **24***a* in the clip members with the pierced opening or hole in member **17**, whereupon the fastener is inserted and flattened to hold the socket member in place.

The purpose of varying the size and shape of the socket-like member **23** is to adapt the tool case or kit for use by repairmen, and others, whose tools vary in size and shape. Therefore, by providing a supply of socket-members, the particular purchaser may choose those members which will fit his purposes best. If a change in tools becomes necessary or desirable after a kit has been fitted, it is a simple matter to release the fastening members and to replace any one or all of the socket-members **23** with different socket-like members.

Referring now particularly to Figs. 5, 6 and 7 of the drawings, there is shown in these views a somewhat modified form of tool case or kit embodying the present invention. This case or kit is also adapted to be supported by the user's belt, as indicated in Fig. 1 of the drawings. The case or kit of the present form of the invention comprises preferably three contiguous layers or pieces of material, such as leather, or the like, comprising an inner surface or body member **27** having belt-receiving slots or openings formed therein and two additional pieces of material, namely an outer piece of material **29** and an intermediate piece of material **30**. The outer and intermediate pieces of material **29** and **30** are preferably stitched at **31** and **31***a* along their lower edges and their upright side edges, the upper edges of both pieces being left free to provide separate pockets. The pocket-forming member **30** supports a series or plurality of tool-receiving and supporting socket-like members **32**. As indicated in Fig. 5 of the drawings, the socket-like members **32** extend downwardly and into the pocket-like space provided between the front piece or member **29** and intermediate member **30**. Each of the socket-like members **32** is attached to the member **30** by a clip-like member **33** which latter is held thereto by a fastener **34** similar to the fasteners composed of members **25**, **26**, best illustrated in Figs. 3 and 10. The clip members **33** are generally like the clip members **24**, although they may be of different sizes as seen in Fig. 5, and are provided at their upper ends with holes or openings to receive the fasteners **34**. By virtue of the fact that the socket-like tool-receiving members **32** project downwardly into the pocket or space below the upper edge **29***a* of the outer piece, the tools are definitely guided into the pocket of

the holder and cannot possibly be accidentally positioned outside the outer piece **29**.

The intermediate piece or portion **30** provides a second pocket **30***a*, and a second series of tool-receiving socket-like members **35** may be mounted upon the backing piece **27**. As shown, these socket-like members **35** project upwardly above the intermediate layer or piece **30** but their lower ends project downwardly behind this member and into pocket **30***a*. Each of the socket-like members **35** corresponds to the socket-like members **32** and is held in position upon the surface **27** by means of clips **36** which are similar to the clips **24** and **33**, previously described. Each of these clips **36** is provided at its upper end with openings to receive fasteners similar to those shown in Fig. 10 of the drawings. Thus, the series or row of socket-like members **35** is detachably mounted upon the surface **27** in a manner similar to the mounting of the tool-receiving members **32** carried by portion **30** of the tool case or kit of the present form of the invention.

The lower portions of both pockets are provided with protective means to prevent damage to the stitching **31** and **31***a*. For this purpose, like strips or tapes formed from cord, rubber, plastic, or some other suitable material **38** and **38***a* are interposed between the members **27** and **30** and the members **29** and **30**, respectively, before they are stitched together. The stitching **31***a* is caused to penetrate the protective strip **38**, whereas the stitching **31** will penetrate strip **38***a*, thereby holding both strips securely in place. As in the case of the protecting strip **22** shown in Fig. 4 of the drawings, the bulk or major portions of the strips **38** and **38***a* are disposed in the spaces adjacent the inner wall **27** and the intermediate wall **30** and the outer wall and said intermediate wall **30**, respectively, so that the lower ends of all of the tools which are placed in the kit or tool case will come in contact with these protective pieces of material and cannot come into contact with the actual stitching **31** and **31***a*. Thus, the life of the tool case or kit of the present form of the invention is also materially increased over conventional cases in the same manner as is the other form of the invention previously described and best illustrated in Figs. 1 through 4 of the drawings.

It may be desirable, in some instances, to substitute for the individual and independent clip-supported tool-receiving socket members, single bands or strips of material, such as leather, which are held to a portion of the tool case or kit by means of specially formed spaced clips which are located between individual portions of the strip to provide individual or separate sockets for tools. One such arrangement embodying the invention is illustrated in Figs. 12 and 13 of the drawings. In this form of the invention, a piece or strip of leather, for example, shown at **40** is shaped to provide two separate tool-receiving socket-like portions **41** and **42**, by means of a specially shaped clip member **43**, which is held to the strip **41** and a supporting piece, such as a backing member of the tool kit (not shown) by rivet-like fastening means **44**, similar to the fastener shown in Fig. 10 of the drawings. It will be understood, of course, that a strip or piece of material, such as that shown at **40**, of the desired length may be employed so as to provide the desired number of sockets for receiving separate and individual tools. Moreover, by using the proper length of material, the size of these socket members, such as sockets **41** and **42**, as well as the shape thereof, may be varied. It is to be noted that the upper inturned flange on member **43** provides metallic or other hard means for protecting the socket-like portions **41** and **42** when a tool is inserted thereinto by the workman.

To assist in varying the shape or conformation of the sockets, reference being had to Fig. 11 of the drawings, a special type of clip member, such as the tapered plate-like member **45** of this figure may be employed. It will be understood that after a piece, similar to piece **41**, has been shaped to provide the desired socket formation, the plate-like member **45** is applied to it and secured to the supporting member, such as a backing sheet (not shown), by passing one of the rivet-like fasteners of Fig. 10 through the opening **45***a* formed in plate **45**. Any number of these plates **45** may be employed, the number being determined by the number of sockets which it is desired to form from the strip of material **40**. By using a series of the plate-like fasteners **45**, it will be understood that the individual spaced socket members will each diverge toward its lower end and converge toward its upper end.

With particular reference to Fig. 14 of the drawings, there is shown in this view a somewhat modified form of means for protecting the threads which hold the parts of the kit together. As shown, the threads **20***a* are first protected by the usual protecting strip **22***a* which may be similar to the strip **22** in Fig. 4, and additionally by a flap or tongue **17***b* which may be formed by slitting the leather of the backing piece **17***a*. A pocket **21***a* is provided between the back wall **17***a* and the front wall **19***a*. If desired, however, in lieu of the integral flap or strip member **17***b*, a separate strip of leather may be attached to the backing member **17***a* in any suitable manner, as by means of rivets. This extra protection for the threads **20***a* is important where the kit is used to carry a large number of relatively sharp or otherwise pointed tools.

In Fig. 15 of the drawings there is shown an independent socket member, shown as a whole at **50**, provided for the purpose of supporting a single tool. The member **50** is provided with an upward extension having a front portion **51** and a back portion **52** which are preferably secured together to provide a loop adapted to be slipped over the belt of the workman. The socket portion **53** has upon its back wall a preferably pre-formed clip or member **54** which is preferably made from spring metal or any other suitable material that will take and maintain a given shape. The clip-like member **54** is secured to the socket by a rivet **55** which also serves to secure the parts **51** and **52** together to provide the belt-receiving loop. If desirable, the clip-like member **54** may be supplied in flat form so that the person purchasing the socket member or tool case can shape the clip to suit his own convenience.

Another adaptation of a single and preferably free-shaped clip member is indicated in Fig. 16, wherein a clip member **56** having an outward bulge **57** is secured by means of a suitable rivet **58** to the face of the backing piece **17***a* of a tool kit. It is intended that this clip-like member be used in connection with any suitable socket member formed from non-metallic material, such as leather, see, for example, the socket member **23** of the preceding views and **35***a* of Fig. 17.

In Figs. 17 and 18 there is shown a somewhat modified form of clip and socket means for use in connection with a kit like those of the preceding views of the drawings. As shown, a U-shaped clip member **24***a*, similar to member **24** of Fig. 9, is provided with openings at its upper end and is slipped over a socket member **35***a*, which may be similar to socket member **23** of Fig. 8 of the drawings, after which a hole is punched in the back wall or member **27***a* of the tool case or kit, which kit may be similar to that shown in Fig. 6. To provide means for frictionally maintaining a tool in position in the socket **35***a* against any possibility of accidental displacement, an additional clip member or plate **60** is provided. This plate-like member may be formed from spring metal or from any other suitable material which will take and maintain its shape after being shaped, and has an opening or aperture **61** adjacent its upper end. The member **60**, as shown, is bowed outwardly so that when a tool is inserted between it and the outer wall of socket member **35***a*, it will be held in position even though a workman might have to assume a prone position in doing his job or might even have to have his head and torso at a lower level than his legs and feet. No matter what position the workman assumes, there is no chance for a tool becoming accidentally dislodged or displaced from socket **35***a*. The same separable

rivet member, comprising male member **25***a* and female member **26***a* are passed through the aligned openings **24***e* in the clip member **24***a*, and **61** in the bowed plate-member **60** to secure the parts together as clearly seen in Fig. 17. The several parts of the structure of Fig. 17 are shown in separated or exploded condition in Fig. 18. As seen in this figure, the outer portion of the substantially U-shaped clip member **24***a* is provided with a rib or projecting portion **24***g*. This rib or projecting portion is adapted to cooperate with a similar rib or projecting portion **60***a* formed on the bowed plate-like member **60**. This provides a relatively neat arrangement and fit for the parts and by making the U-shaped clip member as shown and the plate member **60** as shown, it is a simple matter to apply the plate **60** to the clip member **24** when the two are attached to the tool case to support socket **35***a*. If friction means for holding the tool in place are not desirable, the clip member **60** may be eliminated. The broken lines in Fig. 17 of the drawing indicate the manner in which the plate member **60** may be shaped or formed to the convenience of use of the particular socket member **35** and the particular tool which it is to accommodate.

From the foregoing it will be seen that I have provided several different forms of improved tool case or kit embodying the present invention and it will also be seen that by simply removing and replacing socket members a tool kit may be formed which suits or fits the needs of the individual using the kit. Since repairmen and maintenance men in different fields of endeavour are required to carry different types of tools for performing their work, the present invention affords a very fine solution to their problem insofar as portable tool cases and kits is concerned. The purchaser of a tool kit embodying the present invention may choose the type of socket members and the number of them which he needs for his immediate purposes, but if conditions change during the use of the kit, it is a simple matter for him to remedy the situation by rearranging and/or substituting new and different sockets for those originally installed. The improved tool case or kit of this invention thus provides for universal use among workmen who are required to carry on their persons a number of different tools to perform their work.

By virtue of my foregoing invention of a tool kit or case having individual sockets or pockets for individual tools, it is a simple matter for the owner or carrier of the kit, or the superintendent or foreman on the job, to detect

a missing tool or tools. This is a great improvement over bulk tool kits or boxes heretofore used, in which a number of tools were grouped together, requiring a careful check or inventory of all of the tools to detect a missing tool or tools.

Moreover, by virtue of the use of the extra reinforcing or thread-protecting means **17***b* shown in Fig. 14 of the drawings, the threads, such as threads **20***a*, are fully protected against damage when the tool case or kit contains specially shaped tools, such as those without conventional shanks.

Having thus described my invention what I claim is:

In a kit for tools having three contiguous layers of material comprising inner, outer and intermediate surfaces of the kit and joined by lines of stitching, of a pair of protective strips of wear-resistant material disposed between and fitted against the inner and intermediate surfaces and the intermediate and outer surfaces adjoining the lines of stitching in positions to prevent penetration of tools carried in the kit into contact with said lines of stitching, a row of removable and interchangeable tool-receiving sockets carried by the inner layer, a second row of removable and interchangeable tool-receiving sockets carried by the intermediate layer, and separable rivet-like fastening devices for mounting the individual sockets of the rows in position upon the kit, said inner layer having means cooperable with a garment belt for supporting the kit in suspended condition on the body of the wearer.

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