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問 1

[0009] In order to develop a napped pile cloth of which a grinning phenomenon does not occur when the cloth is extended along a complex geometry or while the cloth is folded, the inventors have conceived of the use of polyurethane elastic fiber for a ground weave of warp and weft yarns so as to impart elasticity to the ground weave of the napped pile cloth, such as a moquette. The inventors have manufactured the cloth by way of trial. The obtained cloth exhibits excellence in elasticity while the grinning phenomenon is suppressed to a certain extent. However, elongations of the cloth in the warp and weft directions are not balanced, which causes generation of undulation or warping on the surface of the cloth before the cloth is installed. This leads to a problem that the undulation or warping of the cloth leads to deterioration of workability during cutting and sewing the cloth, and the undulation of the surface of the cloth remains after installation, which degrades external appearance of a product. In addition, the ground weave is excessively elongative. Accordingly, it is difficult to control pile generation during weaving, leading to defects, such as uneven cuts, while severing double-pile fabric.

問 2

[0042] By pushing the blade 33 of the chisel 31 in this state so as to cause the blade 33 to be closer to the engraving object 38, as illustrated in the bottom view in Fig. 11, the loop portion 18, which is formed of a soft synthetic resin, deforms in the direction indicated by the arrow due to a reaction force from the engraving object 38. The loop portion 18 deforms in such a manner allows the blade 33 of the chisel 31 to form a desired cutting groove while the blade 33 of the chisel 31 comes in contact with the engraving object 38. When the blade 33 of the chisel 31 is pushed further, the bottom side of the tip portion 20 of the loop portion 18 slides along the engraving object 38 with movement of the blade 33 while the bottom side of the tip portion 20 is in contact with the top surface of the engraving object 38. In this embodiment, when the chisel cover 16 is viewed from above, anything that hampers the use of the blade 33 also does not cover the blade 33.

[0043] Thus, the tip portion 20 of the chisel cover 16 is, when use, always located in front of the blade 33. Thus, if the left hand 44 is placed in front of the blade 33 and the chisel 31 is pushed inadvertently, the tip portion 20 touches the left hand 44, which eliminates the likelihood of the blade 33 directly touching the left hand 44. In addition, when the left hand touches the tip portion 20, the reaction force of the tip portion 20 is

transferred to the tip face 35 of the chisel 31 via the body 17, which is the same as in the first embodiment. The further protrusion of the chisel 31 is reliably prevented.

問 3

1. A link apparatus for a sliding door including three doors consisting of a left door (4), a middle door (6), and a right door (5) that can open/close a front opening (2) of a housing (1) and that is disposed so as to be movable in a right-left direction in such a manner that the three doors overlaps each other in a front-rear direction, the link apparatus comprising:

a guide rail (17) that is disposed on a back side of the middle door (6) and extends in an up-down direction, the guide rail (17) including an interconnection member (10) that is disposed so as to be able to ascend/descend the guide rail (17); and a pair of right and left link bars (8, 9) that have one ends being turnably connected to respective back sides of the left door (4) and the right door (5) and have the other ends being connected to the interconnection member (10), the pair of right and left link bars (8, 9) enabling each of the three doors to move synchronously when the three doors open/close, wherein

a moving distance of the left door (4) relative to the middle door (6) and a moving distance of the right door (5) relative to the middle door (6) are made different when the three doors open/close by making an angle between an axis of one of the right and left link bars (8, 9) and an axis of the guide rail (17) different from an angle of an axis of the other one of the right and left link bars (8, 9) and the axis of the guide rail (17).