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DOWELS
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Fig. 2



Fig. 1

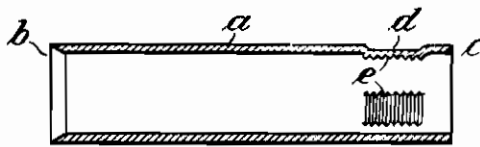


Fig. 4

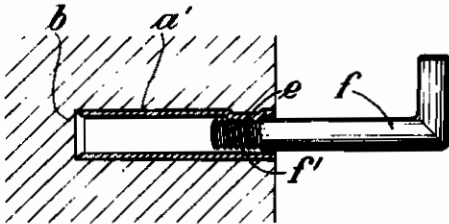


Fig. 3

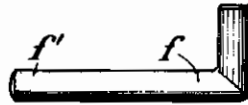


Fig. 6

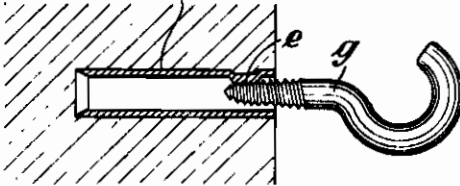


Fig. 5



Fig. 8

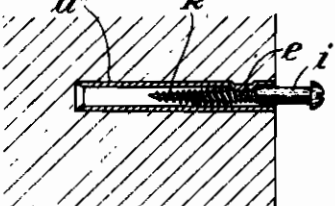


Fig. 7



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ALIEN PROPERTY CUSTODIAN

DOWELS

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My invention relates to improvements in fastening means of the type known as dowels, adapted to be driven into walls or masonry made of bricks, tiles or the like, and which are used for holding therein bolts, pins, hooks, screws etc. collectively called hereinafter bolts.

The principal object of the invention is to provide a structurally improved dowel for the purpose set forth, wherein bolts can be quickly fixed and in a dependable manner, even by unskilled people, irrespectively of whether or not the bolts are threaded, and which type of screw threads they may be provided with.

The invention further aims at providing a structurally improved dowel, which can be easily made in large quantities and can be put on the market at a low price.

Still other objects of the invention will become incidentally apparent to practitioners in this field as the description proceeds.

The nature and scope of the invention will be more fully understood from the following specification taken together with the attached drawing, wherein

Fig. 1 is a longitudinal section through a dowel redesigned according to this invention and shown in a somewhat enlarged scale,

Fig. 2 is a front view of the dowel as seen from the right side of Fig. 1,

Fig. 3 shows by way of an example a rectangular threadless hook to be fixed according to this invention in dowels of the design shown.

Fig. 4 is a longitudinal section through a dowel driven into a wall, wherein a hook as shown in Fig. 3 is fixed.

Fig. 5 shows a threaded, arc shaped hook to be used for the purposes of this invention.

Fig. 6 is a longitudinal section through a dowel driven into a wall and holding a hook of the design shown in Fig. 5,

Fig. 7 shows by way of an example a wood screw to be used for the purposes of this invention,

Fig. 8 is a longitudinal section through a dowel

driven into a wall and holding a wood screw of the design shown in Fig. 7.

The fastening means redesigned with the objects in view outlined above and shown in Figs. 1 and 2 comprises:

A tubular dowel *a* preferably made of sheet steel and presenting at its rear end a circumferential bevelled cutting edge *b*, outwardly directed; said dowel is internally formed near its front end *c* with a plurality of circumferentially spaced screw dies *e* integral with and cut into shoulders *d* of the dowel projecting thereinto, owing to radial impressions made in the tube.

The said screw dies *e* are hardened, so as to promote their cutting action.

As seen in Figs. 3 and 4 a threadless rectangular bolt *f* on being turned into the dowel *a'* will be automatically threaded at *f'* and thereby firmly fixed in the dowel.

An arc shaped hook *g*, the shaft *h* of which represents a wood screw, will get new threads piercing the threads of the wood screw, on being turned into the dowel *a'*, as seen in Figs. 5 and 6.

A conventional wood screw *i*, *k* having a slit head, when being turned into a dowel *a''* of appropriate diameter, as seen in Figs. 7 and 8, may receive additional threads adjacent the threads of the screw *k*. The additional threads serve for fixing the screw *i* in the dowel *a''*.

Good results have been obtained with dowels made of flat blanks of sheet steel which were rolled up so as to present tubular shells, and in which three shoulders *d* were formed by locally compressing the shells from without; said shoulders were threaded, so as to obtain screw dies *e*, the cutting edges *b* were formed and finally the dowels are hardened.

Various other modifications and changes may be conveniently made in the structural details of dowels of the improved design described, without substantially departing from the spirit and the salient ideas of this invention.

JOHANNES STIEGELMEYER.