Dec. 7, 1943. G. W. BECKETT 2,335,903

PAPER CLIP

Filed July 10, 1942

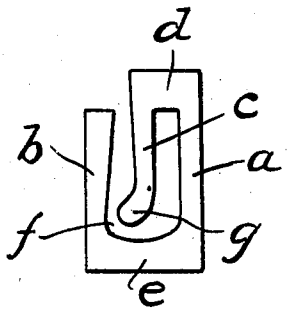


FIG. 1.

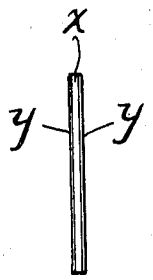


FIG. 2.

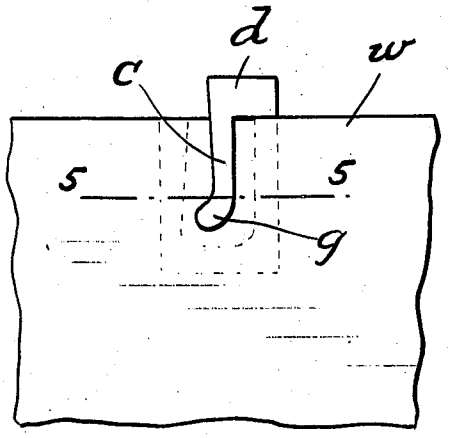


FIG. 3.

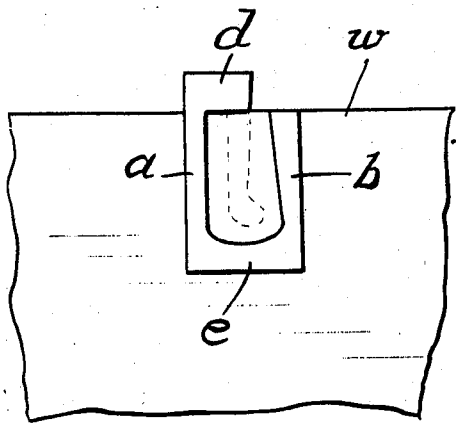


FIG. 4.

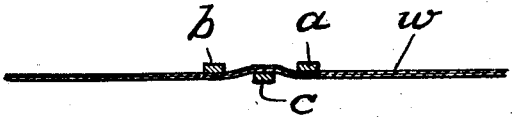


FIG. 5.

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2,335,903

PAPER CLIP

Gardner W. Beckett, Jacksonville, Fla.

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6 Claims. (Cl. 24—259)

The object of my invention is to provide a paper clip or fastener, capable of being applied and removed as readily as any of the types of metal wire clips and adapted, after application, to more securely hold the paper sheets together. A paper clip made in accordance with my invention achieves this object. Another object of the invention is to so shape the clip that it can be made of wood, thereby securing a cheaper product. In fact, when made of wood the clip functions more effectively and dependably than when made of any other material.

In the drawing, which illustrates a preferred embodiment of the invention—

Fig. 1 is a face view of the clip.

Fig. 2 is an edge view of the clip.

Fig. 3 is a face view, and Fig. 4 a rear view, of the clip applied to a plurality of sheets of paper.

Fig. 5 is a section on the line 5—5 of Fig. 3.

The clip is formed from a flat piece of material. As above stated this material is preferably wood; and still more preferably a relatively thick body of wood covered, preferably front and back, with relatively thin layers *y* of paper or other thin flexible material. The reason for utilizing a body of wood and a cover of paper will be hereinafter explained.

Each clip comprises a U-shaped frame one arm *a* of which is longer than the other arm *b*. Between the arms of the U and connected with the upper end of its longer arm by a short transverse member *d* is a central arm *c* spaced from both side arms *a* and *b* and terminating short of the transverse member *e* of the U. The shorter side arm *b* near the transverse member *e* is cut away on its inner edge to form a shallow concavity *f* opening toward the lower free end of the central arm *c*. Such concavity may be formed, if desired, by a gradual reduction of the width of the arm from its free end toward the transverse member *e* of the U. The free end of the central arm *c* has a projection *g* extending toward the concavity *f*.

In applying the clip to the paper sheets *w* to be secured together, the central arm *c* is bent forward and the clip is then slipped into such position that the central arm *c* overlies the top sheet, the short connecting member *d* extends outside, along and adjacent to the aligning edges of the sheets and the U frame overlies the rear sheet.

If the fastener is made mainly or wholly of wood, the wood selected should be tough, flexible and elastic. Hickory is preferred. After engagement of the fastener with the paper, the tension imposed upon the central arm *c* by its forcible displacement from parallelism with the remaining part of the fastener causes it to tightly grip the paper sheets and bind them backward out of alignment with the body of the sheets. The transverse projection at the lower end of the central arm *c* is found to be effective to so securely anchor the end of the arm to the paper as to prevent any rocking of the fastener or its accidental disengagement, although it may be readily removed by first gripping the short transverse member *d* between the ends of the fingers.

When the clip or the main body thereof, is made of wood, it is important that the grain of the wood should extend parallel with the direction of extension of the arms of the clip, since the bending strain to which the arms, and particularly the central arm, are exposed would tend to break them if the grain ran in a direction at right angles to the direction of extension of the arms. The transverse arm uniting the arms of the U and the transverse arm between the upper ends of the central bar and one side bar are not subjected to any severe bending strain. So far as that exists, however, it is neutralized by applying to one or both faces of the wood body *x* a cover *y* of thin flexible material, which may conveniently be paper. If the covering material exhibits any grain comparable to that of wood, the grain should extend in a direction at right angles to that of the wood.

The clip need not be made of wood. It may be made, less desirably, of a plastic substance or possibly of other material. However, if made of carefully selected wood, it operates most satisfactorily and dependably and may be used an indefinite number of times without danger of breakage. It is operative to secure together as many sheets as it is practicable to unite by means of the common wire clip. It is distinctly superior to the ordinary wire clip in its resistance to lateral rocking or displacement, slippage and resultant disengagement. If made of wood its cost of manufacture is much less than that of the common metal wire clip.

What I claim and desire to protect by Letters Patent is:

1. A paper clip having front and rear flat parallel faces and comprising side bars, a lower cross bar connecting the lower ends of the side bars and forming with them a U shape, a central bar, a cross-bar connecting the upper end of the central bar with the upper end of only one of the side bars, the other side bar having

a free upper end, the central bar being otherwise spaced from both side bars and spaced also from the lower cross bar, the central bar having at its lower end bent obliquely toward the side bar with which it is not united at the top.

2. A paper clip having front and rear flat parallel faces and comprising side bars, a lower cross bar connecting the lower ends of the side bars and forming with them a U shape, a central bar, a cross-bar connecting the upper end of the central bar with the upper end of only one of the side bars, the other side bar having a free upper end, the central bar being otherwise spaced from both side bars and spaced also from the lower cross bar, the central bar having its lower end projecting toward, but terminating short of, the side bar with which it is not united at the top, the latter named side bar being of less width opposite the projecting lower end of the central bar than at its upper end.

3. A paper clip having front and rear flat parallel faces and comprising side bars, a lower cross bar connecting the lower ends of the side bars and forming with them a U shape, a central bar, a cross-bar connecting the upper end of the central bar with the upper end of only one of the side bars, the other side bar having a free upper end, the central bar being otherwise spaced from both side bars and spaced also from the lower cross bar, the central bar having at its lower end a lateral projection extending toward the side bar with which it is not united at the top, the latter named side bar being shorter than the other side bar by a length approximating the width of the upper transverse bar and thus terminating approximately opposite the lower edge of the upper transverse bar.

4. A paper clip having front and rear flat parallel faces and comprising side bars of different length, a lower cross-bar uniting the lower ends of the side bars and forming with them a U shape, a central bar connected at the top with only the longer side bar, the shorter side bar having a free upper end, the central bar being otherwise spaced from both side bars and spaced also from the lower cross bar, and a projection on the lower face end of the central bar extending toward, but terminating short of, the shorter side bar.

5. A paper clip comprising a U-shaped frame, an extension from the end of one arm of the U extending transversely toward the other arm of the U and thence down between said arms and spaced from both, the lower part of the last named arm nearer the transverse bend of the U having a shallow concavity facing the lower free end of said extension, the latter having a projection extending transversely toward, but terminating short of said concavity, the front and rear faces of the clip being flat and parallel.

6. A paper clip in accordance with claim 5 in which the latter named arm of the frame is shorter than the other arm.

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