June 24, 1958 C. O. BAILAR 2,839,990

PAPER BALER

Filed Dec. 12, 1957

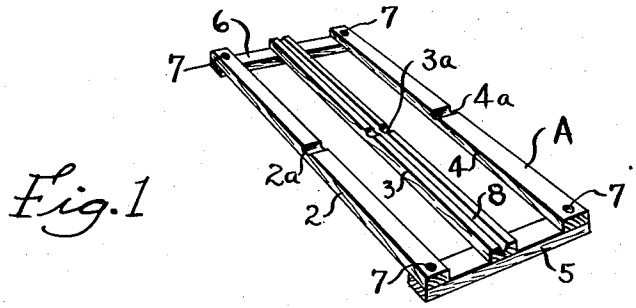


Fig. 1

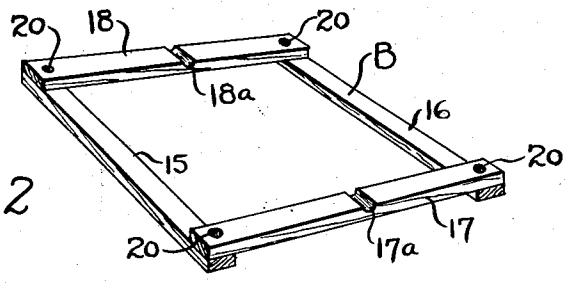


Fig. 2

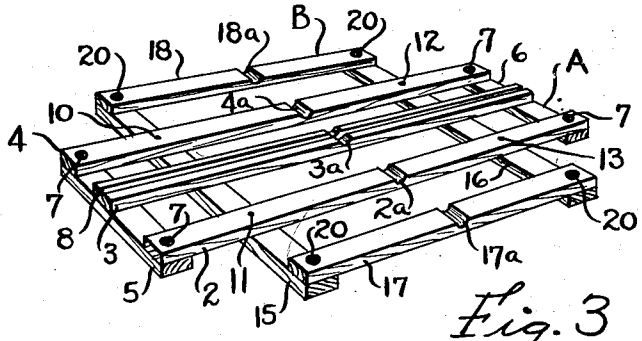


Fig. 3

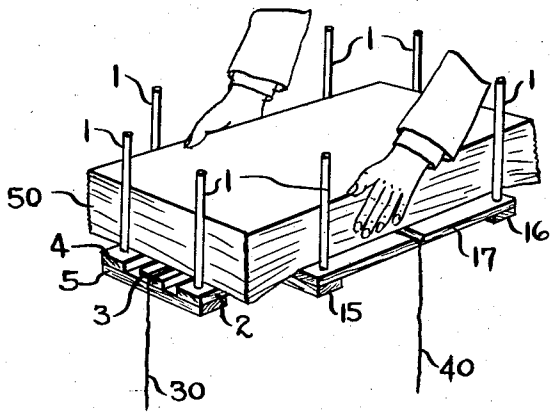


Fig. 4

INVENTOR.
CHARLES O. BAILAR
BY Joseph Rossman
ATTORNEY

United States Patent Office 2,839,990 Patented June 24, 1958

2,839,990

PAPER BALER

Charles O. Bailar, Menasha, Wis.

Application December 12, 1957, Serial No. 702,302

1 Claim. (Cl. 100—1)

This invention relates to a baler for bundling flat articles, such as newspapers, magazines, sheets and the like. The baler is constructed of a plurality of strips of wood, plastic, metal and the like which may be supplied in disassembled form and are adapted to be assembled and fastened together by the user for use.

Further details and advantages of my invention will be apparent from the following description and accompanying drawing, wherein

Figure 1 is a perspective view of one frame member of the baler,

Figure 2 is a perspective view of a second frame member.

Figure 3 is a perspective view of the frame members shown in Figures 1 and 2 in assembled relation to form the baler, and

Figure 4 is a perspective view of the baler shown in Figure 3 in use for baling newspapers and the like.

Referring to the drawings, Figure 3 shows a baler constructed according to my invention, consisting of a lower frame member, designated generally by letter B, and an upper frame member, designated generally by letter A. The two frame members are superposed in the relation shown in Figure 3 and fastened together at their contacting areas by means of nails or screws **10**, **11**, **12** and **13** to form a rigid assembly. The upper frame member A is preferably formed of three strips of wood **2**, **3** and **4** of substantially equal length and width which are spaced apart equally and fastened to cross-pieces **5** and **6** by nails or screws at their respective ends. The strips **2**, **3** and **4** are provided, respectively, with aligned transverse grooves **2***a*, **3***a* and **4***a* at their medial portions which extend at right angles to the longitudinal axis of these strips, as shown in Figure 1. The intermediate strip **3** is also provided with a medial longitudinally extending continuous groove **8** which is adapted to receive and retain a length of string or wire **30**, as shown in Figure 4, for use in bundling the sheets to be stacked in the baler.

The lower rectangular frame member B is preferably formed of two spaced strips **15** and **16** joined at their respective ends by two spaced cross-strips **17** and **18**, all of which are substantially the same length and width and which are suitably fastened together by nails or screws at their respective ends to form the rectangular frame B. Strips **17** and **18** are provided with aligned grooves **17***a* and **18***a*, respectively, at the medial portions of the strips. The frame member A is then superposed upon lower frame member B, as shown in Figure 3, so that the grooves **17***a* and **18***a* are aligned with the aligned grooves **2***a*, **3***a* and **4***a*. These aligned grooves extend at right angles to groove **8**. These aligned grooves are adapted to receive a length of string or wire **40**, as shown in Figure 4, for tying the sheets or newspapers **50** stacked

on the bundler as shown in Figure 4. The ends of strips **2** and **4** are preferably provided with dowel holes **7** of suitable depth to receive vertically extending removable pins or dowels **1**, and likewise the ends of strips **17** and **18** are provided with dowel holes **20** for receiving removable pins or dowels **1** of suitable length as shown in Figure 4. The pins **1** serve as vertical retaining members for aligning the newspapers or other sheets **50** to be stacked and tied together by strings **30** and **40**.

The strips constituting my baler may be shipped in disassembled form together with screws or nails for assembly by the user so as to minimize shipping space, but if desired the baler may be shipped in assembled condition as shown in Figure 3. The strips may be made of any suitable material, such as wood, plastic or metal and may be of any suitable dimensions depending upon the size of the articles to be baled. Before any articles are stacked in the baler, a suitable length of string or wire **30** is first placed in groove **8** and another length of string or wire **40** is positioned in aligned grooves **17***a*, **2***a*, **3***a* and **18***a* at right angles to groove **8**. After a suitable number of articles **50** are stacked up in the baler as shown in Figure 4, the ends of string **30** are tied together, and likewise the ends of string **40** are tied together. The bundle is then removed from the baler after which new strings are replaced in the grooves and the baler is ready for use again.

It is to be understood that the numerous modifications and changes may be made in the specific embodiment of the baler previously described. The ends of the strips may for example be joined by mitre joints or they may be interfitted or retained by any suitable fastening means. The frame members may be molded in one piece instead of being formed of separate strips.

I claim:

A baler for bundling flat articles comprising a lower rectangular frame member formed of two spaced strips joined at their respective ends by two spaced cross-strips, an upper rectangular frame member formed of three spaced longitudinal members joined at their ends by spaced cross-members, the intermediate longitudinal member of said upper rectangular frame being provided with a continuous longitudinally extending groove for receiving therein a length of string and the like, said upper frame member being superposed on said lower frame member and attached thereto at contacting portions thereof, the spaced strips of said lower frame member being provided with aligned grooves at the medial portions thereof intersecting said continuous longitudinal groove in the said intermediate member of said upper rectangular frame, said three longitudinal spaced members of said upper rectangular frame member being provided at the intermediate portions thereof with aligned grooves extending transversely of the said continuous longitudinal groove and in alignment with the grooves in the said spaced strips of said lower frame member, said upper and lower frame members being provided with holes adjacent their corner portions for removably retaining vertically extending retaining members for aligning flat articles supported by the baler.

References Cited in the file of this patent

UNITED STATES PATENTS

1,195,795	Dyer	Aug. 22, 1916
1,777,694	Halteman	Oct. 7, 1930
2,593,588	McDonald	Apr. 22, 1952