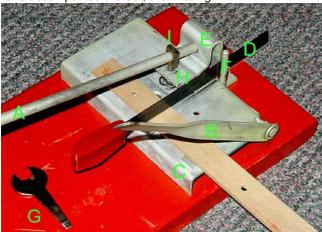
'New' System: BILD-R-JIG This small American system is perhaps the simplest of the 'DIY' type yet seen. It consists of a Tool, Wooden Strips as structural members, a Saw to cut them to length, and lengths of thin Aluminium Strip to be cut and bent up to make brackets.

The Box measures $12\frac{1}{4}*6\frac{1}{2}*2\frac{3}{4}$ ", and the top is shown below. The words bottom left are 'PAT PEND.', but no patent



is known so far. The full depth sides of the lid include details of the maker in small letters, and the 2 models shown later. The N&B are in a cream card box, $1^{7}/_8 \times 5^{3}/_8 \times 1^{7}/_2$ ", with 'This box contains / BILD-R-RIG / BOLTS & NUTS' on the lid in red. The instructions or manual which would almost certainly have accompanied the Set, are missing.



The Tool, above, is made of substantial sheradised steel parts welded together, and its flanged base plate is $2^{\frac{5}{8}*4^{\frac{7}{8}}}$ ". It is fixed to the wooden base $(10*7^{\frac{3}{8}*3^{\frac{1}{4}}})$ by 2 wood screws. The detachable handle, 'A', for the hole punch, 8" long & 1/4" Ø, passes through the hole in the top of the die, 'I', and then into the hole in the bracket 'E', the latter providing the fulcrum. In use a Strip is pushed forward under the bottom of the U-bracket 'H', against a stop which ensures the punched hole is central across the Strip. Inside the U-bracket a small split pin through the die spindle pushes down a return spring. The die makes clean holes in the wood and the aluminium Strips. The shearing blade, 'B', is used to cut the aluminium to length, and the metal Strip is located against a $^{7/}_{16}$ " long raised stop, 'C', during the operation. The wood is cut to length by a $6\frac{1}{2}$ " long, 18 tpi, Saw, 'D', with a 11/2" red plastic handle moulded onto the end. (There may originally have been handles on the ends of the die handle & the shearing blade as well.) From the wear marks on the Tool, the method probably recommended was to hold the Strip back against the stop 'C' (as in the photo), pass the Saw blade between the bracket 'E' and the pin 'F', and then saw keeping the blade against the sides of

Leading Particulars

Name BILD-R-JIG Country U.S.A.

Maker M.H.Colvin Co., Buffalo 21, New York.

History

Hole dia. 3.9mm. Hole pitch As required.

Sets One, unnumbered, known.

Material/Finish Plain wooden Strips; plain aluminium Strips.

Fixing Bright steel 6-32 N&B. 6.4mm Ø RH Bolts, 8.0mm u/h. Machined hex Nuts, 7.6mm A/F,2.7mm thick.

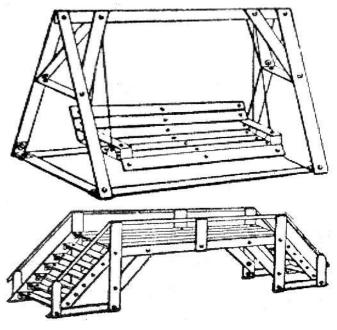
Remarks No circular parts, Axles, Motor, or Gears.

'E' & 'H'. Brackets could be made from the Aluminium Strip by bending around the pin 'F'.

The **Wood Strip** is ${}^{3}\!\!/_{4} {}^{*} \!\!/_{8}{}^{*}$ in section, quite soft, and was probably supplied in 12" lengths - the pieces found in the box are the equivalent of 20 such lengths. The **Aluminium Strip** is ${}^{3}\!\!/_{4}{}^{*}$.020", also quite soft, and the combined lengths of all the pieces found is about 30".

47 **Bolts** were in the Set, and 47 **Nuts**. However although all the Nuts are the same size externally, a handful were tapped with a smaller thread than the 6-32 of the Bolts & the other Nuts, perhaps 5-44. The **Span'driver**, 'G', is 2" long and is made of $\frac{1}{16}$ " nickeled steel.

Models. The Bridge on the top of the lid, and the 2 models below, from its side (converted to B&W), are probably typical. It isn't clear what the handrails of the Bridge are made from – it would not be practical to reduce the width of either type of Strip with the tools provided.



Thank you to David Hobson for lending me his Set for this account.