



The finished bender, showing the handles, hinges, angle iron etc. Diagrams herewith give details of construction.

A FOLDER FOR METAL SHEET

If you are in the habit of making your own experimental chassis and boxes, using a vice and a few blocks of wood, you have no doubt wished many times for a proper folder. Commercial units are generally too costly but here is one which will cost only a few shillings and is simple enough for any amateur mechanic to construct.

ACTUALLY constructed in our workshop for our own use, it was prompted by a desire to eliminate the tedious process of bending chassis and boxes by hand and to render us independent of other departments where equipment always seems to be tied up on other projects when we wish to use it.

When we commenced the job we had no intention of publishing a description but the final result worked out so well we considered that many readers would find the idea useful. We also commenced work with only the vaguest idea of what the finished product would look like. It more or less "just grewed", like Topsy, as we added this and that until the job would perform the various functions we required of it.

MAINLY SOFT METAL

We based our design on the assumption that it would be required to handle only the softer metals, particularly aluminium, and that the

heaviest would probably be about 16 gauge. On this assumption one may quite reasonably take liberties which would be ruled out if most of the work contemplated involved large bends on equivalent gauges of steel.

On the other hand it is reasonable to expect that it will handle an occasional job in this material, providing it is not too large or in too heavy a gauge. As we shall see later, there are various ways in which the unit may be made stronger if the builder so desires.

Briefly, the device consists of two pieces of stout hardwood, held together by substantial hinges, and arranged to fold to an angle of 90 degrees. The work is held against the wood by means of a length of angle iron, this forming the actual edge over which the metal is bent. Reference to the photograph and drawings will give a good idea of the assembly.

The two pieces of hardwood form the basis of the unit and in our case they measured 2ft 3in x 3in x 1 1-16in. Allowing for the hinges, this length will allow a fold up to 18in.

Experience indicates that this is about the maximum for wood of this thickness, there being a tendency for it to bow with heavy work.

SIZE IS IMPORTANT

This is where the individual should make his own choice and decide what is the largest job he is likely to handle, remembering that the shorter this dimension the heavier the work which can be undertaken. With a capacity of only 12in it is likely that mild steel could be handled without difficulty.

The wood should be dressed smooth all over and one edge on each piece should be planed straight and square. If you lack the skill and facilities to tackle this it should be possible to have the job done by the local joiners or the timber yard