Moving parts need to be both held and allowed to move. Some may slide but many will hinge or pivot. Here a few of the many ways this can be achieved. None of the examples shown below relies on holes being drilled.

A This is a simple folded hinge. This won't work if the card is too thick and brittle. Fold the card first one way and then the other, each time creasing the fold firmly. The fold will become slack, bending freely. However, if this is subjected to repeated folding and unfolding it will eventually tear as the fibres become weaker and weaker.

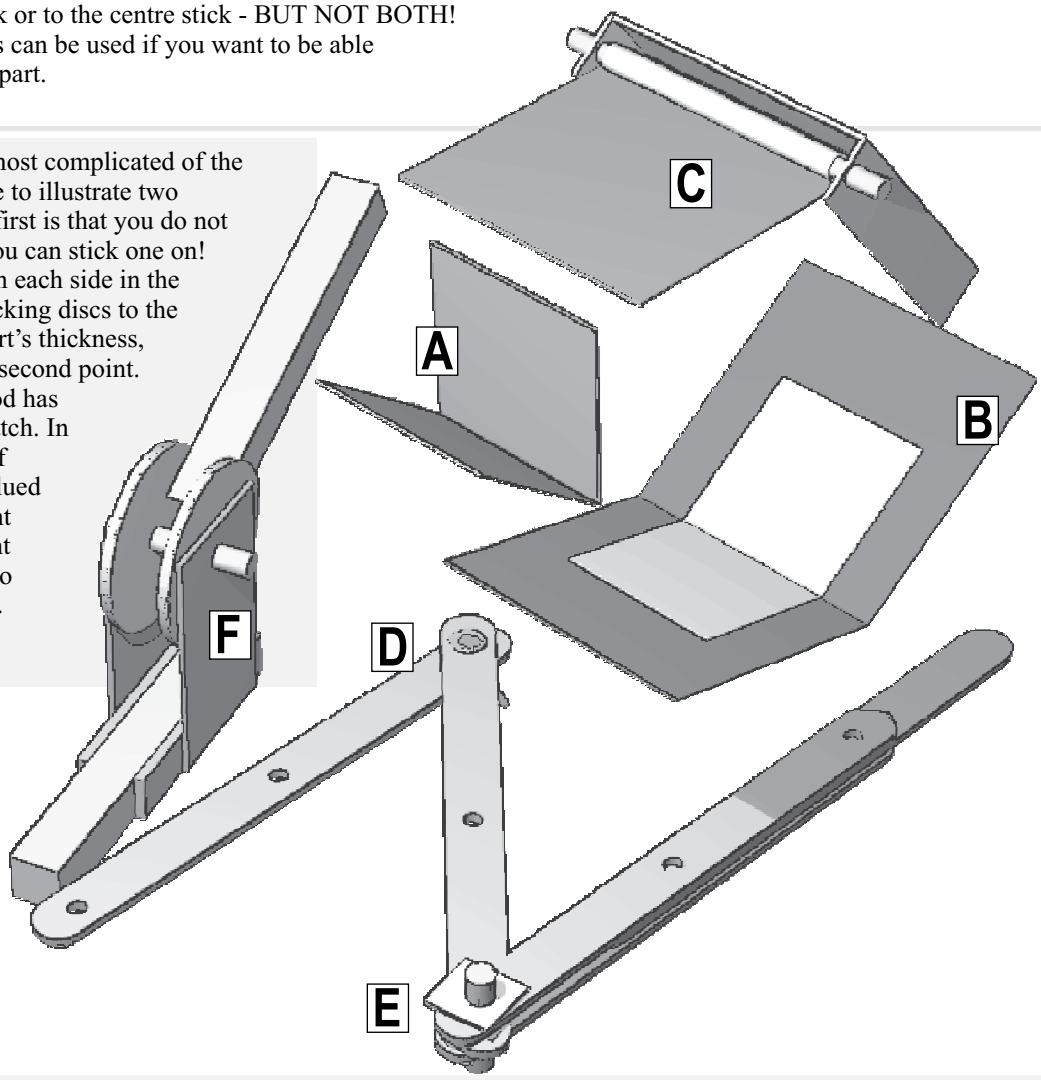
B This is almost the same but represents a sticky tape hinge. If the card to be hinged is thick and brittle you will have to add a more flexible hinge, hence the tape. The important point to remember is that the tape will need to be fitted to the INSIDE surfaces, especially if the card is thick. If you want to stick it on the outside you will have to leave a narrow space between the two cards. The way to do this is as follows. Put the two cards face to face and stick the tape OVER the edges, then open the hinge. You will see that the two cards no longer touch. For a stronger hinge you could lay the cards open, and then put a second piece of tape on the inside.

C This one uses a dowel or paper stick rotating in a straw. The straw is glued to one part and holes are punched in the other. The dowel passes through both the holes and the straw. The dowel will need to be fixed. It could be glued into the holes (but NOT the straw) or stoppers could be fitted on the ends of the dowel..

D Back to basics. A brass paper fastener. Although shown here linking lolly sticks, the paper fastener is more useful when fastening paper - what a surprise! When using thin card (or thick paper) it's possible to push the fastener through the card without punching a hole. This is alright as long as you don't do the same through both layers. The legs of the fastener make a slit rather than a hole, and the fastener won't go round in that slit. On the other hand, if you punch the holes the fastener will be very loose - a very wobbly pivot. Remember, if it's a pivot you want, don't press the legs too hard after they have been opened.

E This is a more engineered pivot. A dowel passes through three lolly sticks. Two form a fork and the third moves between them. The dowel could be glued either to the fork or to the centre stick - BUT NOT BOTH! Or, as shown, stoppers can be used if you want to be able to take the assembly apart.

F This is obviously the most complicated of the pivots shown. It is here to illustrate two important points. The first is that you do not have to drill a hole - you can stick one on! In this case two, one on each side in the form of card discs. Sticking discs to the wood increases that part's thickness, which brings us to the second point. The other piece of wood has been 'thickened' to match. In this case two lengths of lolly stick have been glued to the sides. If you want neat, smooth movement you must be prepared to make parts fit properly.



These examples are shown just to give you an idea of what is possible - ways to explore. Most of the projects set out in this book have moving parts. Some use versions of the examples shown above. If someone has a particular problem they should consider trawling through the pages to see if that problem, or one like it, has been dealt with on one of the worksheets. If a possible solution is found, it still might need to be modified - but it beats trying to 'invent' a solution every time. Transferring solutions from one problem to an another is an important skill.