My invention relates to feed tables such as are used for a stack of sheets which are being fed to a printing press, a cutting and creasing press, or any other machine adapted to operate on sheets. I have chosen to illustrate my invention in connection with a well known type of printing press. The object of the invention is to provide a table for holding the sheets in position for the feeder to take them in the operation of feeding the sheets to the press; and also to provide a device of this character which may be folded up out of the way, and to give the greatest room to permit access to the working parts of the press, whenever that is desired. With the present invention it is possible to raise the rear leaf of the feed table to give maximum space for access to the bed of the press, or the forward leaf may be folded up to give maximum room for access to the cylinder of the press. The folding operations may be carried out very quickly and the device is simple in construction and operation.

In the drawings forming part of this application:
Figure 1 is a sectional view through the feed table embodying my invention, and showing some parts of the printing press in side elevation.
Figure 2 is a plan view of one side of the feed table.
Figure 3 is a side elevation of a portion of the feed table on an enlarged scale.
Figure 4 is a plan view of the same parts.
Figure 5 is a side elevation of the device, showing it lifted to provide access to the bed of the press, and
Figure 6 is a similar view showing the table lifted or folded up to permit access to the cylinder of the press.

In the drawings I have shown only such parts of the printing press as may be necessary to illustrate one application of my invention. For instance, I have shown a portion of the side frame 10 of the press from which extends upwardly at the rear end a bracket 11 which serves to support one end of the feed table. Spaced from this bracket is the usual impression cylinder 12 which first receives the sheet from the feed table and carries it around into contact with the form on the reciprocating bed 13. In preparation for running a job, it is necessary at times for the pressman to have access to the form on the reciprocating bed, and the more accessible the form is, the less time required to carry out the preparatory work. Likewise, the more accessible the impression cylinder is in preparing the make ready, the quicker this work can be performed. As the feed table is over and adjacent these two parts of the press, it is necessary to move the same in order to have access to the bed and impression cylinder, and while various devices have been proposed in the form of movable tables, the object of the present construction is to permit the table to be folded quickly and completely out of the way and at the same time retaining the simplest form of mechanism for the purpose.

I have shown the feed table composed of a plurality of leaves some of which are separately movable, but adapted to lie in a common plane when the table is in actual operation as shown in Figure 1. For this purpose I have employed a rearmost leaf 14 and next to this there is another leaf 15 which is attached to the first one by means of a hinge 16 adjacent their meeting edges. These two leaves are foldable as will appear in the subsequent description. Forward of the leaves referred to I have shown additional leaves 17 and 18 which are not necessarily movable or foldable in relation to each other.

The leaf 14 is attached to the lever arms 19 which pivot from the point 20 on the bracket 11. The leaf 15, as above stated, is hinged to the leaf 14 and therefore it is indirectly connected to the lever arms 19. The leaves 17, 18 are attached to supporting lever arms 21 which are pivoted to the bracket 11 at the point 20 so that they are supported at one end by the bracket 11. When in operative position the arms 21 are supported at the opposite end by means of a rest block 22 secured to the side frame 10 of the press. The lever arms 19 and 21 are duplicated at opposite sides of the machine and together form pairs with the table leaves connected between them.
to form rigid units which pivot at the point 20. The levers of which the arms 19 form a part, have a short arm 23 on the opposite side of the pivot 20 and this arm is adapted to strike the stop pin 24 when the levers are rocked into the position shown in Figure 5.

The lever 21 has an arm 25 extending in the opposite direction to the longer arms 21. This short arm 25 is adapted to come up against the stop pin 26 when the levers are swung into the position shown in Figure 6.

As above stated, the table leaf 14 is fixed to the lever arms 19 and the leaf 15 is pivoted by means of the hinge 16 to the leaf 14. The opposite end of this leaf 15 is connected by means of an arm 19 with the lever arm 21 at one side of the machine, the arm 3 being preferably connected by a screw 3 threaded into the boss 6, so that the arm 3 may pivot about this screw. The opposite end of the arm 3 is pivoted to the leaf 15, and I have shown a sleeve 4 set into an aperture in the edge of this leaf with a pin 1 extending through the sleeve and connected by a nut 28 which sets into a recess 5 in the under side of the table leaf. The pin 1 serves as a second pivotal point where the arm 3 connects with the leaf 15. The arm 3 and the lever arms 19 and 21 constitute, together with the leaf 15, a substantially parallel movement device.

When the feed table is in active use, the parts will be in the position shown in Figure 1, where the arms 19 and 21 lie in the same plane, and the tops of all of the leaves are disposed in a common plane. A pile of sheets may be placed on the table and the operator advances the sheets, one at a time, along the table toward the impression cylinder 12. Whenever it is desired to perform any work upon the form on the bed of the press, the parts of the table are swung into the position shown in Figure 5. That is to say, the table leaf 14 is lifted and this causes the arms 19 to which it is secured, to swing from the pivotal point 20 until the arm 23 strikes against the stop pin 24 whereupon the parts will remain in this position. When the leaf 14 is thus swung upwardly, it carries with it one end of the leaf 15 by reason of the hinge connection 16, and it causes the arm 3 to swing about the pivotal point 2, so that the leaf 15 is lifted and moved forwardly into the position shown in Figure 5. This allows the pressman to have free access to the bed or to the form carried by it, assuming the bed has been moved to a rear position on the press. If it is desired to have access to the impression cylinder, the leaf 14 will be swung backwardly and downwardly into the position shown in Figure 6, and the leaves 17, 18, together with the lever arms 21 will be swung rearwardly and upwardly or to the right, until these parts arrive at the position shown in Figure 6, with the arm 25 resting against the stop pin 26.

During this movement, one end of the leaf 15 pivots about the hinge 16 and the other end of this leaf is carried back by the pivotal arm 3. In this position of the parts the pressman may pass freely in between the brackets 11 and the impression cylinder, for the purpose of arranging the make ready on the cylinder, or for any other purpose. From the above it will be apparent that I have provided a device whereby the leaves of the table may be moved completely free of either the bed or the impression cylinder, and that the operation is carried out by merely swinging the lever arms 19 or the lever arms 21 and their associated table leaves.

Having described my invention, what I claim is:

1. In a feed table for presses the combination of a plurality of pivotal supports, table leaves carried by each of said pivotal supports and adapted to lie in substantially the same plane when in operative position, and another table leaf having a pivotal connection thereon connected with one of said first leaves and a pivoted link connected with one of said pivotal supports and with said third mentioned table leaf.

2. In a feed table for presses a pivotal support having a table leaf carried thereby, a second pivotal support having a table leaf carried thereby and adapted to lie substantially in the same plane as said first table leaf when in operative position, an intermediate table leaf pivotally connected adjacent one edge of said second table leaf and a pivoted link connected with the opposite end of said third leaf and with the rocking support which carries said first mentioned table leaf.

3. In a feed table for presses the combination of a pivotal support carrying a table leaf, a second pivotal support rocking from substantially the same axis as said first pivotal support and carrying a table leaf adapted to lie substantially in the same plane as said first leaf, and an intermediate table leaf pivotally connected with said second table leaf adjacent one edge thereof, and a pivoted link connected adjacent the opposite end of said third leaf from its said pivotal connection, said link being pivoted to the pivotal support which carries said first mentioned table leaf.

4. In a feed table for presses the combination of a pivotal support carrying a table leaf, a second table leaf pivotally connected adjacent one edge of said first leaf, and a link for supporting the opposite end of said second leaf and forming with said pivotal support a substantially parallel motion device.

5. In a feed table for presses the combination of a pivotal support carrying a table leaf, a second table leaf pivotally connected adjacent one edge of said first leaf, and a link pivoted to the end of said second leaf opposite its connection with the first leaf for partially supporting said second leaf.
6. In a feed table for presses the combination of a pivotal support carrying a table leaf, a second pivotal support carrying a table leaf adapted to lie in substantially the same plane as said first leaf when in operative position and in spaced relation to said first leaf, and a third table leaf adapted to lie between said first and second leaves when in operative position, said third table leaf being pivotally connected with said second table leaf adjacent one edge thereof and a pivoted link connected adjacent the free end of said third leaf and also pivotally connected with the said first mentioned pivotal support at a point spaced from the pivot of said first mentioned support.

7. A press feed table for the stock, comprising front and rear sections mounted on supports to permit said sections to be swung into and out of active position, at least one of said sections including table leaves arranged to fold in relation to each other, and means for automatically operating a folding table leaf when either said front or said rear section is swung into or out of active position.

8. A press feed table for the stock, comprising front and rear sections mounted on supports to permit said sections to be swung into and out of active position, at least one of said sections including table leaves arranged to fold in relation to each other, and a pivoted link for causing the folding leaves to operate automatically in relation to each other.

9. A press feed table for the stock, comprising a section mounted on pivotal supports and adapted to be swung into and out of active position, said section including leaves fixedly attached to said pivotal supports and a leaf pivotally carried on said pivotal supports, and a link for supporting the opposite end of said second mentioned leaf.

10. A press feed table for the stock, comprising a section mounted on pivotal supports and adapted to be swung into and out of active position, said section including leaves fixedly attached to said pivotal supports, a leaf pivotally carried on said pivotal supports and a link for supporting the opposite end of said second leaf and forming with said pivotal supports a substantially parallel motion device.

11. A press feed table for the stock, comprising front and rear sections mounted on pivotal supports to permit the sections to be swung into and out of active position, one of said sections including a plurality of table leaves, one of said leaves being pivoted in relation to the other, and a link for supporting the pivot said end of said pivoted leaf.

12. A press feed table for the stock, comprising front and rear sections mounted on pivotal supports to permit said sections to be swung into and out of active position, one of said sections having a leaf pivoted in relation to its support, and a link pivotally connecting said leaf to the other section and adapted to cause said leaf to be swung on its support automatically as said support is swung.

Signed at the city and county of New London, State of Connecticut, the 3rd day of April, 1928.

JAMES E. BENNET.