March 27, 1956 A. TRIEBEL, JR 2,739,826

NOTEBOOK

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Fig. 1

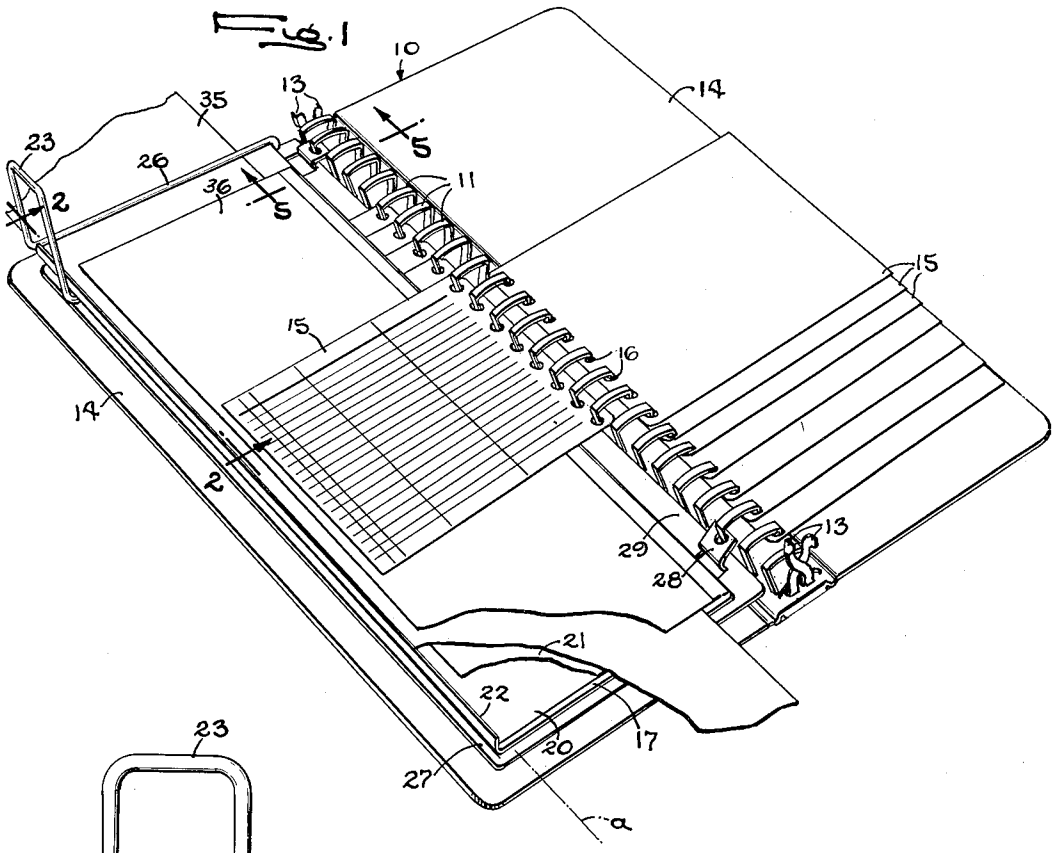


Fig. 2

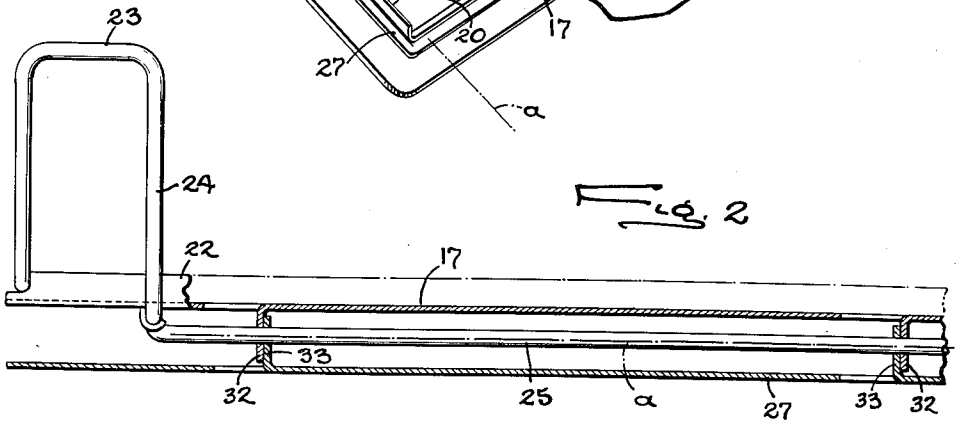
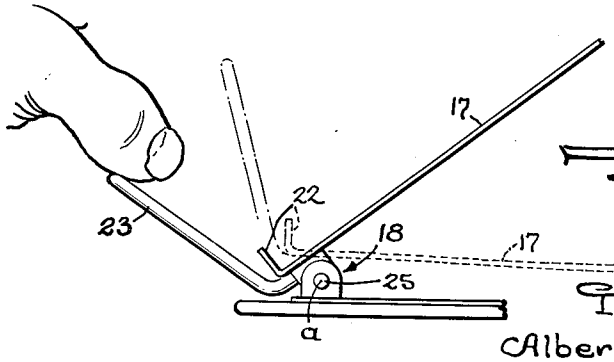


Fig. 3



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Fig. 4

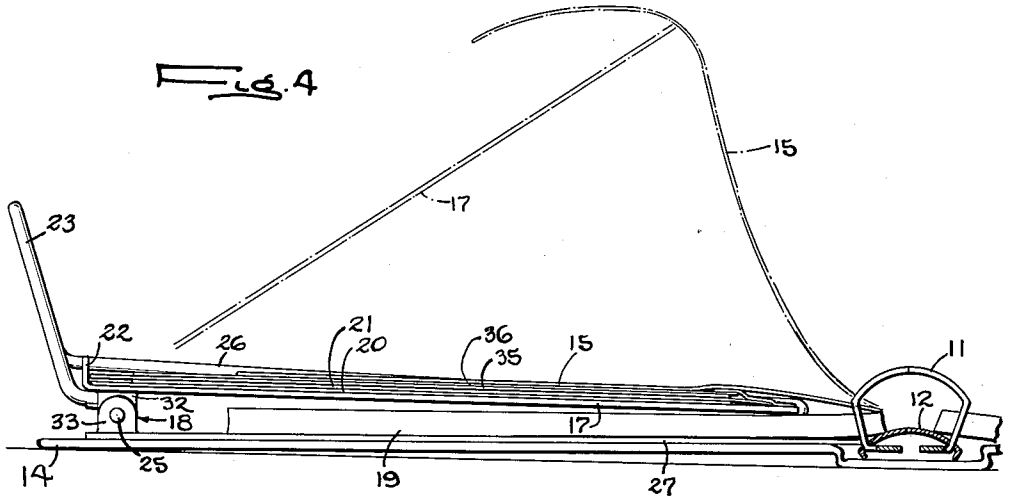
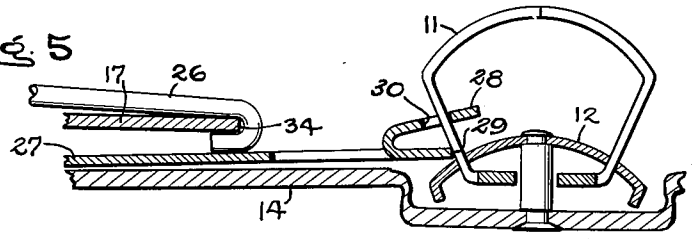


Fig. 5



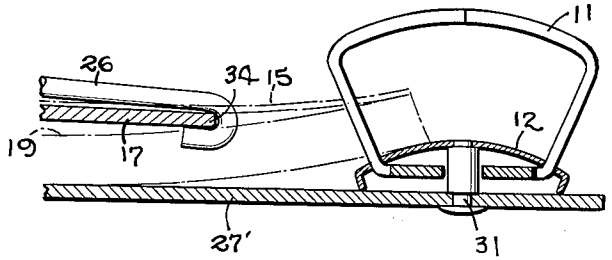


Fig. 6

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NOTEBOOK

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3 Claims. (Cl. 282—8)

This invention relates to looseleaf notebooks or bookkeeping devices in which a row of split rings is mounted on a support, such as the cover of the notebook, and serves to hold sheets of notebook paper in place. More particularly, the invention has reference to a notebook in which a plate is disposed alongside the row of rings and is pivotally supported adjacent its outer edge to swing upwardly about an axis paralleling the row and permit a sheet of paper resting on the plate to fall beneath the latter and out of the way.

The general object is to provide a new and improved notebook of the above character in which the plate may be swung upwardly about its axis by a simple manual application of downward pressure, in which the plate is accurately mounted with respect to the rings so that any point on the plate is in a fixed position relative to a sheet held by the rings, and in which the number of parts is reduced and the construction is simplified.

A more detailed object is to swing the plate upwardly by the downward application of pressure to an arm which is secured to the plate and projects upwardly and outwardly from the axis of the plate when the notebook is resting on a generally horizontal support.

Another object is to connect the rings and the plate by a rigid member so that the axis of the plate and hence any point on the plate is in a predetermined fixed position with respect to the rings.

The invention also resides in the novel and simplified construction of the hinge for supporting the plate and the arm for swinging the plate.

Other objects and advantages of the invention will become apparent from the following detailed description taken in connection with the accompanying drawings, in which:

Figure 1 is a perspective view of a notebook embodying the novel features of the present invention.

Fig. 2 is an enlarged fragmentary sectional view taken along the line 2—2 in Fig. 1.

Fig. 3 is a fragmentary end view illustrating the manner in which the plate is swung about its pivotal axis.

Fig. 4 is an end view showing the operation of the swinging plate.

Fig. 5 is a fragmentary sectional view taken along the line 5—5 in Fig. 1.

Fig. 6 is a view similar to Fig. 5 and illustrates a modified form of the invention.

For purposes of illustration, the invention is shown in the drawings embodied in a looseleaf notebook **10** in which a plurality of split rings **11** are mounted in a row on a support **12** in the form of a conventional spring strip or tension plate disposed between the ring segments and extending throughout the length of the row, the rings being opened against the action of the spring strip by squeezing together pairs of trigger arms **13** located at opposite ends of the row. Preferably, the spring strip **12** is secured to and disposed between two stiff rectangular covers **14** suitably hinged together and the rings **11** are closely spaced to receive sheets **15** of notebook

paper having similarly spaced holes **16** punched along one edge.

Alongside the rings **11** is a rectangular plate **17** somewhat smaller in size than the cover **14** and made of sheet metal or other suitable material which is smooth and hard enough to provide a writing surface and sufficiently rigid to remain flat. Adjacent its outer edge, the plate **17** is pivotally supported by hinges **18** (Figs. 2 and 4) to swing about an axis *a* paralleling the row of rings **11** so that, when the plate is swung up about this axis, a sheet **15** resting on the plate will be supported progressively nearer its outer edge as shown in Fig. 4 until it falls onto a stack **19** beneath the plate where it is out of the way when the plate **17** is returned to its original position.

With the foregoing arrangement, the sheets **15** may be individual record sheets and staggered on the rings **11** as shown in Fig. 1 and a master or journal sheet **20** may be taped to or otherwise held on the plate **17** under a sheet **21** of carbon paper, the outer edge of the journal sheet being disposed against a flange **22** upstanding from the outer edge of the plate. A record sheet is turned over onto the plate, an entry is made along one line and then the plate is swung up to permit this sheet to fall onto the stack **19**. After the plate has been returned to its horizontal position, the next record sheet is turned over onto the plate, an entry is made on the corresponding line and the plate again is swung up and then down. Although the entries are made on the same numbered line of each sheet **15**, the carbon copies of the entries on the journal sheet **20** will be one below the other due to the staggering of the record sheets.

In accordance with one aspect of the invention, upward swinging of the plate **17** is achieved by the manual application of a simple downward pressure so that a person using the notebook **10** may swing the plate with one hand while turning over the next sheet **15** with the other hand. To this end, an arm **23** is fixed to the plate and is disposed at an angle with respect to the plate **17**, the arm extending outwardly from the pivotal axis *a* on the side opposite the main portion of the plate and upwardly from the plate to constitute a thumb tab which serves as a lever arm. In the present instance, the arm is disposed near the upper end of the plate and is formed by a wire portion **24** bent in a generally U-shape with its end portions **25** and **26** connected to the plate in a manner to be described later. Thus, the plate may be swung up simply by placing the thumb on the outer end of the arm **23** as shown in Fig. 3 and pressing straight down. Due to the angle at which the arm is disposed, the latter is swung downwardly about the axis *a* by such pressure swinging the plate upwardly.

In order that the flange **22** will be in a predetermined position with respect to the rings **11** so that the journal sheet **20** and a record sheet **15** are properly disposed with respect to each other, the plate **17** is supported in the notebook **10** in a novel manner by a rigid member **27**. To this end, the latter is hinged to the plate and connected to the rings thus disposing the pivotal axis *a* a fixed distance from the row of rings. Herein, the member **27** is in the form of a second sheet metal plate underlying the first and, in the embodiment shown in Figs. 1 through 5, is connected to the rings by two lugs or tabs **28** which are struck upwardly from the plate near the inner edge **29** of the latter and project inwardly beyond the edge of the plate toward the rings. The tabs **28** are disposed adjacent opposite ends of the plate where they do not interfere with the turning of the sheets **15** and each is formed with a hole **30** which is received by an adjacent ring. The position of the holes **30** is such that, when the rings are closed, the inner edge of the plate abuts against a part rigid with the supporting

strip 12, herein the outer sides of the rings, while the edges of the holes bear against the inside of their corresponding rings as shown in Fig. 5, the tabs 28 being under tension to hold the supporting plate 27 securely in position. In this way, the plate is held against lateral movement fixing the axis *a* in a predetermined position.

Instead of removably connecting the rigid supporting plate to the rings 11, the latter may be mounted rigidly on this plate as shown in Fig. 6. For this purpose, the plate 27' is extended under the spring strip 12 which is fastened in a fixed position to the plate as by rivets 31. As in the preferred embodiment, the axis *a* is a fixed distance from the rings so that the swinging plate 17 bears a predetermined relation to the sheets 15 on the rings. If desired, this form may be used without the covers 14, the plate 27' being, in effect, a cover.

Preferably, the overall construction of the assembly is simplified by using one end portion 25 of the wire 24 as the pintle for the hinges 18. This is achieved by striking ears 32 and 33 respectively from the plates 17 and 27 adjacent the outer edges thereof, the two sets of ears projecting toward each other and constituting the sections of the hinges, and by extending the wire end portion 25 between the plates and through the ears along the axis *a*. Thus the two hinge sections are free to turn relative to each other about the end portion 25 permitting the plate 17 to swing about the axis *a*.

In the present instance, the other end portion 26 projects across the upper end of the swinging plate 17 and is hooked around the inner edge 34 of the latter as shown in Fig. 5 thus rigidly connecting the wire 24 to the plate. The end portion 26 may be spaced above the plate 17 to serve as a guide for a strip 35 (Fig. 1) of blank forms such as checks unwound from a supply roll (not shown) and drawn across the plate under a second sheet 36 of carbon paper so that the entry made on the sheets 15 is also made on these forms.

It will be observed that a notebook constructed in accordance with the present invention is easy to operate, positions the various bookkeeping forms accurately and is of a comparatively simple construction. In using the notebook, a sheet 15 resting on the plate 17 may be transferred to the stack 19 simply by pressing downwardly on the arm 23 with one hand leaving the other hand free to turn over the next sheet. Since the rigid plate member 27 accurately positions the swinging plate 17 with respect to the rings 11, the record sheets 15 are located properly relative to the journal sheet 20 and the strip 35 so that the duplicate entries made on the latter sheets will be in the correct columns. By using the end portions 25 and 26 of the wire 24, which forms the arm 23, as the pintle for the hinges 18 and a guide for the strip 35, the entire assembly requires only four parts, the wire, the two plates and the row of rings. The arrangement shown in Fig. 1 has the additional advantage of being removably inserted in a conventional notebook permitting it to be taken out when the notebook is to be used for other purposes.

I claim as my invention:

1. A bookkeeping device comprising, a support, a plurality of split notebook rings mounted in a row on said support, a rigid member disposed alongside said rings and having an edge abutting against a part rigid with said support, two lugs, one adjacent each end of said row and each being rigid with said member and projecting inwardly beyond said edge toward said rings, said lugs having holes in the ends thereof receiving adjacent ones of said rings with the edge of each hole bearing against the inside of the corresponding ring thereby to hold said member against lateral shifting, a stiff flat plate disposed above said member, and means pivotally connecting said plate to said member for swinging about an axis paralleling said row and spaced laterally a fixed distance from said rings.

2. In a bookkeeping device, the combination of, a rigid member, a row of notebook rings, means connecting said rings and said member, a generally flat plate disposed above said member alongside said row and having a generally flat upper surface, a plurality of hinge sections projecting upwardly from said member and disposed in a line paralleling said row, complementary hinge sections projecting down from said plate, and an elongated wire extending along said line and through all of said hinge sections to define a pivotal axis for said plate, said wire being secured to said plate and one end portion of the wire being bent laterally of said axis to form a lever for swinging said plate then transversely across but spaced above the plate to form a guide for paper on the plate.

3. In a bookkeeping device, the combination of, a rigid member, a row of notebook rings, means connecting said rings and said member, a generally flat plate disposed above said member alongside said row and having a generally flat upper surface, a plurality of hinge sections projecting upwardly from said member and disposed in a line paralleling said row, complementary hinge sections projecting down from said plate, and an elongated wire extending along said line and through all of said hinge sections to define a pivotal axis for said plate, said wire being secured to said plate and a portion of the wire being bent laterally of said axis to constitute a lever for swinging the plate.

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