Dec. 9, 1941. J. E. SPALDING 2,265,822

LOOSE-LEAF BINDER

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Fig. 1.

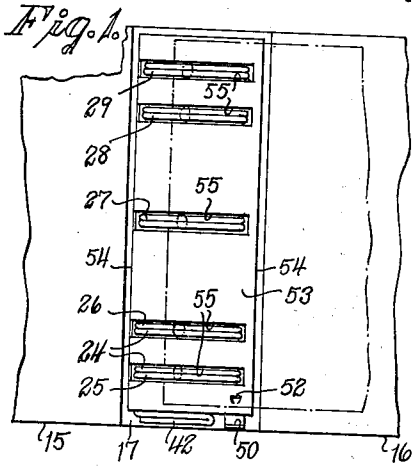


Fig. 2.

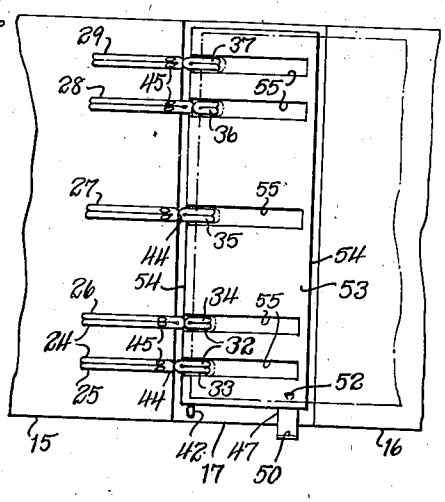


Fig. 3.

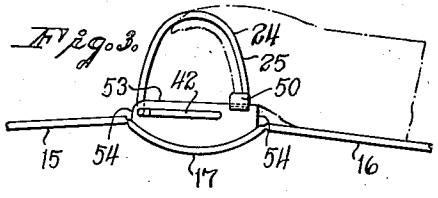


Fig. 4.

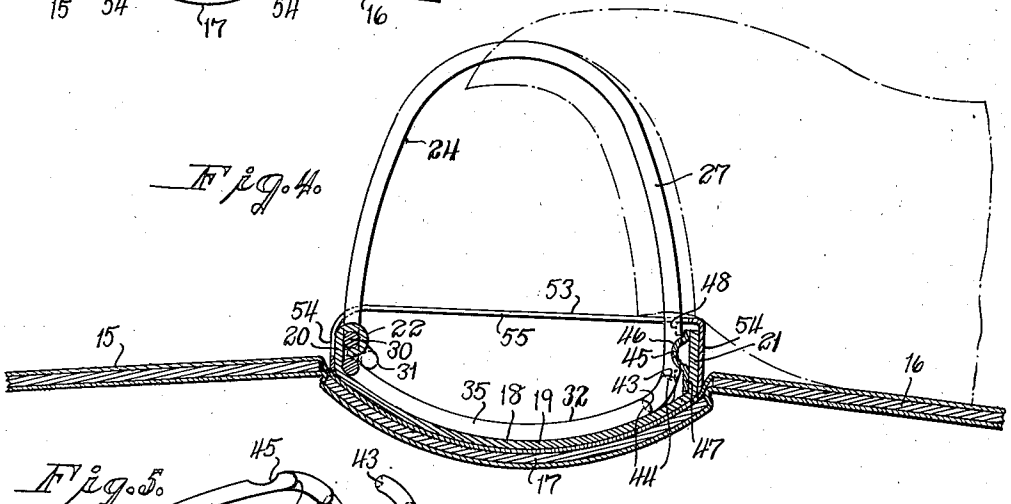
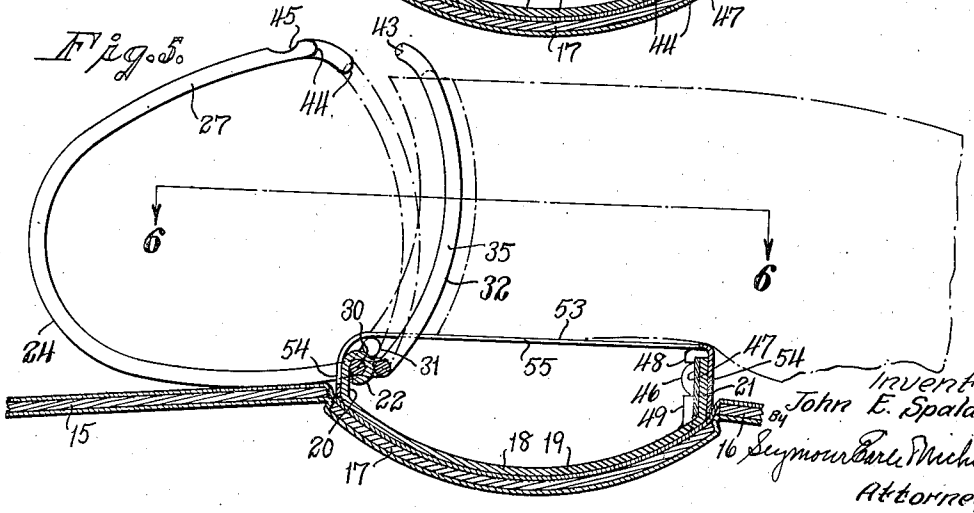


Fig. 5.



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Fig. 6.

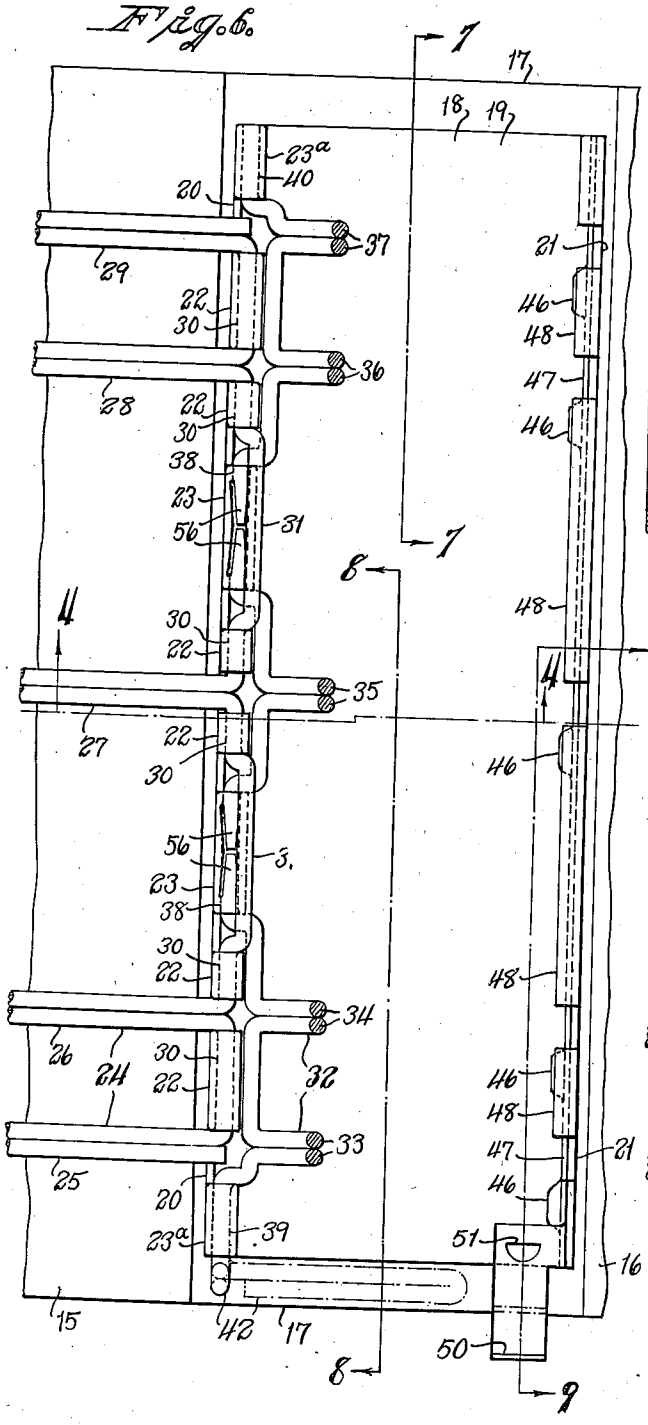


Fig. 7.

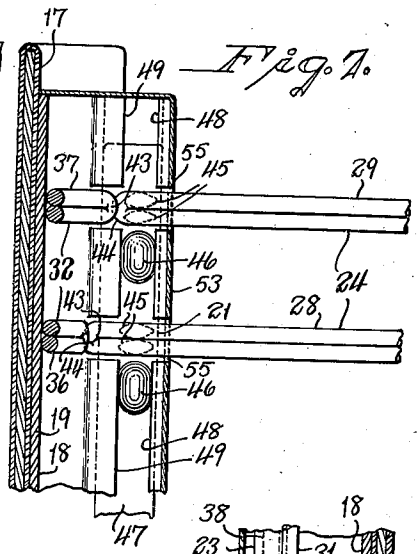
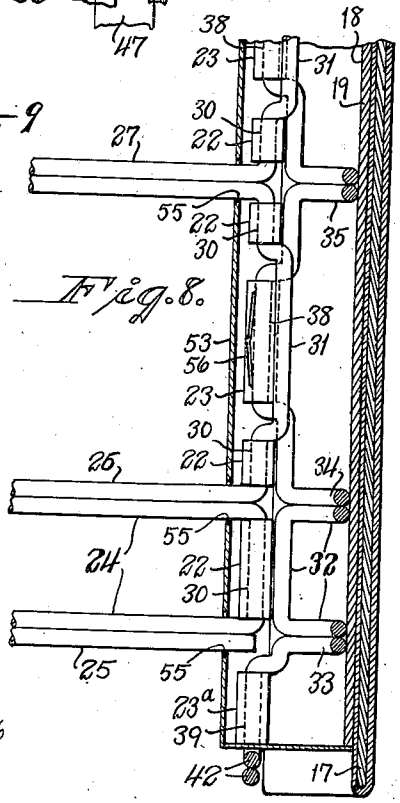


Fig. 8.



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LOOSE-LEAF BINDER

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Fig. 10.

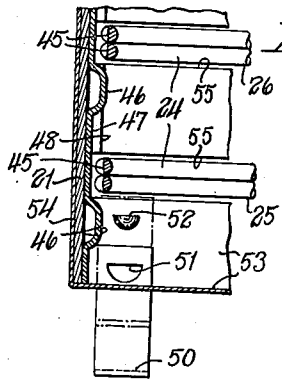


Fig. 9.

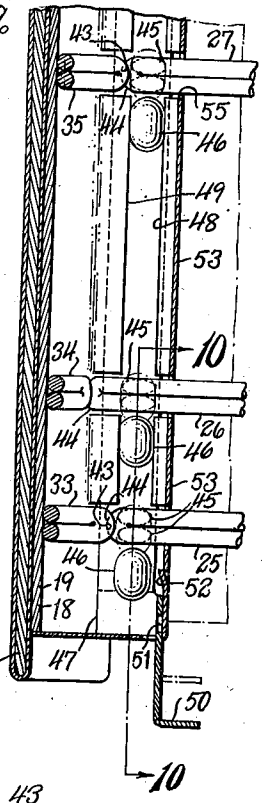


Fig. 11.

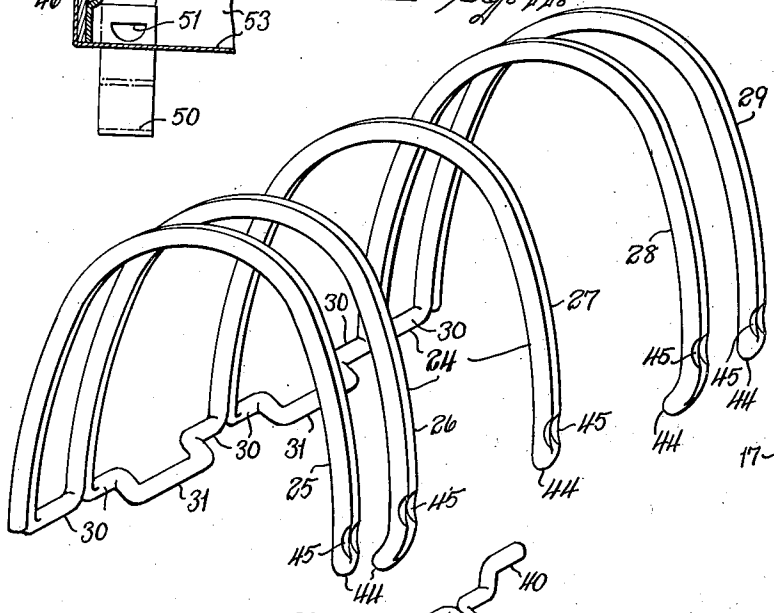


Fig. 12.

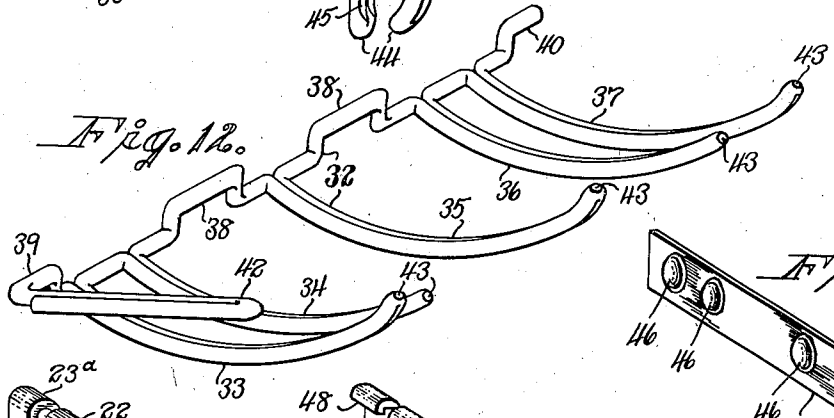


Fig. 14.

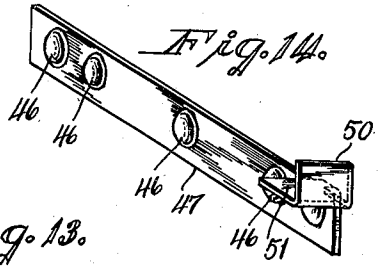
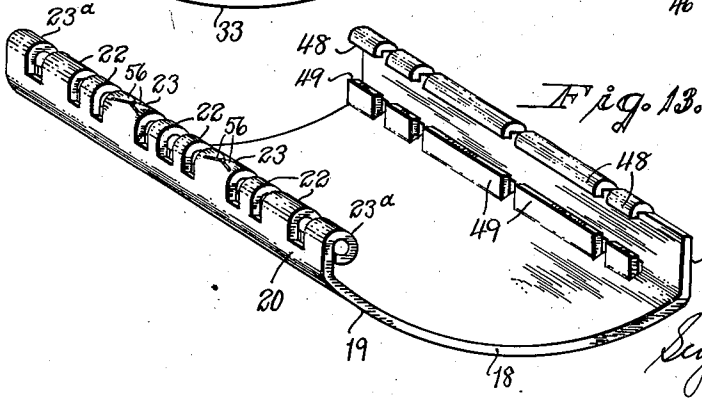


Fig. 13.



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UNITED STATES PATENT OFFICE

2,265,822

LOOSE-LEAF BINDER

John E. Spalding, New Haven, Conn.

Application April 27, 1940, Serial No. 331,961

12 Claims. (Cl. 129—11)

This invention relates to improvements in loose-leaf binders and more particularly to that type of binder commonly referred to as ring binders.

One object of the present invention is to provide a superior loose-leaf binder of such construction and arrangement of parts as to permit the full capacity of the said binder to be utilized without damaging the leaves or sheets thereof while maintaining the thickness of the binder at a minimum.

Another object of the present invention is to provide a loose-leaf binder having superior leaf-retaining loops and leaf-filing arms, the said filing-arms being normally positioned beneath a leaf- or sheet-supporting member.

Still another object of the present invention is to provide a loose-leaf binder having superior leaf-retaining loops and leaf-filing arms which have their abutting ends normally located in such a position as to be out of the path of leafing movement of the leaves or sheets to thus permit the ready leafing of the leaves or sheets of the binder without interference by the said abutting ends.

A further object of the present invention is to provide a loose-leaf binder having superior leaf-retaining loops and leaf-filing arms which latter are so constructed and arranged as to be movable from their normal position into a filing position substantially perpendicular to their normal position to thereby permit the ready insertion of additional leaves or sheets or the removal thereof.

A still further object of the present invention is to provide a loose-leaf binder having superior leaf-filing arms of such construction as to permit the capacity of the binder to be accommodated thereon when the said leaf-filing arms are in their leaf-filing position.

Still another object of the present invention is to provide a loose-leaf binder having superior leaf-retaining loops whose major radii have their centers located beneath the lower surface of the leaves of the binder when the said leaf-retaining loops are in their normal position to thereby permit the full capacity of the binder to be utilized without occasioning binding or cramping of the leaves of the binder.

Still another object of the present invention is to provide a loose-leaf binder having superior leaf-retaining loops whose usable height exceeds one-half the usable width between the loop side-portions to prevent distortion or excessive deflection of the leaves of the binder.

With the above and other objects in view, as will appear to those skilled in the art from the present disclosure, this invention includes all features in the said disclosure which are novel over the prior art and set forth in the appended claims.

In the accompanying drawings, in which certain modes of carrying out the present invention are shown for illustrative purposes:

Fig. 1 is a broken plan view of a loose-leaf binder constructed in accordance with the present invention and shown in its opened position with the leaf-retaining loops in their normal latched position;

Fig. 2 is a similar view but showing the leaf-retaining loops and the filing-arms in their filing position;

Fig. 3 is a broken end view of Fig. 1;

Fig. 4 is an enlarged fragmentary sectional view taken on the line 4—4 of Fig. 6, but showing the leaf-retaining loops and filing-arms in their normal latched positions;

Fig. 5 is a sectional view similar to Fig. 4 but showing the leaf-retaining loops and filing-arms in their filing positions;

Fig. 6 is a fragmentary horizontal sectional view taken on the line 6—6 of Fig. 5, but with the cover-plate omitted;

Fig. 7 is a fragmentary longitudinal sectional view taken on the line 7—7 of Fig. 6, but showing the leaf-retaining loops and filing-arms in their normal positions;

Fig. 8 is a similar view taken on the line 8—8 of Fig. 6;

Fig. 9 is a fragmentary longitudinal sectional view taken on the line 9—9 of Fig. 6, but with the leaf-retaining loops and filing-arms in their normal positions;

Fig. 10 is a fragmentary sectional view taken on the line 10—10 of Fig. 9;

Fig. 11 is a detached perspective view of the leaf-retaining loop unit;

Fig. 12 is a detached perspective view of the filing-arm unit;

Fig. 13 is a detached perspective view of the base-plate; and

Fig. 14 is a perspective view of the latching-slide.

The loose-leaf binder herein chosen for illustrating the present invention includes a front cover 15 and a rear cover 16 which are hinged in any suitable manner to a transversely-curved binding or backing 17. Rigidly secured in any suitable manner to the inner face of the backing 17 just referred to, is the similarly curved por-

tion 18 of a substantially-U-shaped sheet metal base-plate or frame 19. The base-plate 19 extends longitudinally of the backing 17 and is provided on its respective opposite edges with laterally-extending longitudinal flanges 20 and 21. The flange 20 of the base-plate 19 is provided with a plurality of longitudinally-spaced-apart knuckles 22, 23 and 23*a* for the purpose as will hereinafter appear.

The knuckles 22 just above referred to, serve to pivotally mount a leaf-retaining loop-unit generally designated by the reference character 24 and which is particularly well shown in Fig. 11. The said leaf-retaining loop-unit 24 is preferably formed from relatively-heavy wire bent to form a plurality of substantially-U-shaped leaf-retaining loops 25, 26, 27, 28 and 29 which are respectively longitudinally-spaced-apart by journal-portions 30 adapted to be pivotally mounted in the knuckles 22 before referred to of the base-plate 19. The leaf-retaining loops 25, 26, 27, 28 and 29 are adapted to hold or retain perforated leaves or sheets of paper in the usual manner of loose-leaf binders as will later appear. Located between the leaf-retaining loops 26 and 27, and 27 and 28 are two laterally-offset portions 31—31 each of which respectively joins the adjacent journal-portions 30 and which serve to provide clearance for the knuckles 23—23 forming part of the base-plate 19 as before described to thus permit the leaf-retaining unit 24 to be bodily swung about the journal-portions 30 with respect to the base-plate 19.

Located substantially beneath the leaf-retaining unit 24 is a pivotal leaf-filing arm-unit generally designated by the reference character 32 and which is formed in a manner similar to the leaf-retaining unit 24 from relatively-heavy wire bent upon itself to form a plurality of leaf-filing arms 33, 34, 35, 36 and 37 each of which is preferably bowed for the purpose as will hereinafter appear. The leaf-filing arms 33, 34, 35, 36 and 37 are adapted, in a manner and for a purpose as will hereinafter appear, to have threaded or filed thereon perforated leaves or sheets of paper. The said filing-arm unit 32 is provided intermediate the leaf-filing arms 34 and 35 and the leaf-filing arms 35 and 36 with two laterally-offset journal-portions 38—38 which are adapted to be supported in the knuckles 23—23 of the base-plate 19 and serve to pivotally mount the said leaf-filing arm-unit 32 for swinging movement relative to the base-plate 19 for the purpose as will hereinafter appear. The said filing-arm unit 32 is also provided at its respective opposite ends with laterally-offset journal-portions 39 and 40 pivotally mounted in the knuckles 23*a*—23*a* before referred to and provided therefor at the respective opposite ends of the base-plate 19 as is particularly well shown in Fig. 6. The offset journal-portions 38—38 and 39 and 40 are offset to enable the filing-arm unit 32 to be pivotally mounted as just described without interference by the adjacent knuckles 22 pivotally mounting the leaf-retaining unit 24, all as is particularly well shown in Fig. 6. The offset journal-portion 39 of the filing-arm unit 32 is provided at its outer end with a laterally-extending finger-piece 42 for the purpose as will later appear and which is formed by folding back the wire upon itself as is clearly shown in the drawings.

It will be noted by reference to the drawings that the disposition of the respective leaf-retaining loops 25 to 29 inclusive is such as to respectively locate the said leaf-retaining loops above the leaf-filing arms 33 to 37 inclusive and that the free outer ends of the respective leaf-retaining loops and filing-arms are in abutting engagement. For the purpose of assuring the alignment of the free outer ends of the respective leaf-retaining loops and filing-arms with each other, the said filing-arms are provided at their free outer ends with recesses 43 adapted to receive the curved outer ends 44 of the leaf-retaining loops 25 to 29. As thus constructed and arranged the leaf-retaining loops 25, 26, 27, 28 and 29 have their outer free ends respectively in abutting engagement with the filing-arms 33, 34, 35, 36 and 37 when the said leaf-retaining loops and filing-arms are respectively in their normal positions as shown particularly well in Fig. 4. With the parts in this position the respective leaf-retaining loops and filing-arms form a completely closed leaf-retaining member. The retaining member, as just described, has a common center for swinging movement inasmuch as the respective filing-arms and the leaf-retaining loops are mounted for pivotal movement upon a common center formed by the knuckles 22, 23 and 23*a* before described.

For the purpose of releasably holding the leaf-retaining loops 25 to 29 inclusive in their normal positions as shown in Fig. 4, the said retaining-loops are provided in their outer faces adjacent their respective outer free ends 44 with arcuate notches 45. The notches 45 are adapted, when the said leaf-retaining loops are in their normal position as shown in Fig. 4, to receive latching-lugs 46 struck inwardly and forming part of a latching-slide 47 mounted for longitudinal reciprocating movement against the inner face of the flange 21 of the base-plate 19.

The latching-slide 47 is held in place against the inner face of the flange 21 for movement into and out of engagement with the notches 45 of the said leaf-retaining loops by a plurality of guide-fingers 48 which latter are bent inwardly and downwardly from the upper edge of the flange 21 of the base-plate 19. Folded upwardly from the curved portion 18 of the base-plate 19 are complemental guide-fingers 49 which also serve to retain and guide the latching-slide 47.

The said guide-fingers 48 and 49 are appropriately spaced longitudinally of the flange 21 of the base-plate 19 to be located between the respective leaf-retaining loops 25, 26, 27, 28 and 29 when the latter are in their normal positions as shown particularly well in Fig. 9. As thus positioned, space is left between the guide-fingers 48 and 49 for the passage of the free outer ends 44 of the said leaf-retaining loops into position for engagement by the latching-lugs 46 of the latching-slide 47. The spaces between the respective guide-fingers 48 and 49 also permit the free passage of the outer ends 44 of the leaf-retaining loops 25 to 29 inclusive and the outer ends of the filing-arms 33 to 37 inclusive when the said loops and filing-arms are swung about their respective journal portions in a manner as will hereinafter appear.

At the end thereof adjacent the finger-piece 42 of the leaf-filing arm-unit 32 the latching-slide 47 is provided with an operating finger-piece 50 which is bent inwardly and upwardly and by means of which the said latching-slide may be longitudinally moved into or out of latching position. For the purpose of releasably holding the latching-slide 47 in its latching position against accidental or unintentional dis-

placement, the said latching-slide is provided adjacent its operating finger-piece **50** with a retaining-aperture **51** adapted to have entered thereinto a retaining-finger **52** struck inwardly from the upper wall of a cover-plate **53**, through the end wall of which the said finger-piece **50** extends.

The cover-plate **53** serves as a leaf-supporting means and is fitted over the base-plate **19** with its respective side flanges **54—54** in frictional engagement with the outer faces of the flanges **20** and **21** of the said base-plate to be thus securely held in place thereon and enclose the base-plate **19** and the filing-arm unit **32** when the latter is in its normal position. The cover-plate **53** is provided mainly in its upper wall with transversely-extending clearance-slots **55** through which the leaf-retaining loops **25** to **29** inclusive and the filing-arms **33** to **37** inclusive are adapted to be bodily moved about their respective journals.

For the purposes of description let it be assumed that the covers of the binder are in their open position and the leaf-retaining loop-unit **24** and leaf-filing arm-unit **32** are respectively in their normal positions as shown in Figs. 1, 3 and 4, and the latching-slide **47** is in its latching position. With the parts in this position the leaves of the binder, indicated by broken lines in the figures referred to, are supported by the cover-plate **53** and may be leafed or passed over the leaf-retaining loops **25** to **29** inclusive in the customary manner, the binder being used in the usual manner of loose-leaf binders.

It will be noted that with the parts in the positions shown in Fig. 4 of the drawings, that the respective abutting ends of the leaf-retaining loops and the leaf-filing arms are located beneath the cover-plate **53** and hence beneath the lower surface of the leaves, in which position the said abutting ends are beneath and away from the leaves of the binder when the said binder is in its open position as shown in Fig. 4. With the abutting ends of the leaf-retaining loops and filing-arms positioned as just described the said abutting ends do not interfere with the leafing of the leaves of the binder as the exposed part of the leaf-retaining loops present an unbroken surface for the free passage of the leaves thereover. It will also be noted that the centers of the major radii of the leaf-retaining loops are located at a point also beneath the cover-plate **53** which enables the full capacity of the binder to be utilized without distortion or undue deflection of the leaves. It will be further noted that the usable height of the leaf-retaining loops exceeds one-half the usable width between the loop side-portions to further prevent distortion or undue deflection of the leaves, as shown especially well in Fig. 4. As constructed and arranged the leaf-retaining loops also permit the leaves of the binder to be presented in a relatively-flat position when the binder is opened as illustrated in Fig. 4, avoiding excessive bending and deflection of the inner edges of the leaves to thereby make readily visible the inner edges of the said leaves.

When, however, it is desired to insert additional leaves or to remove the same therefrom, the finger-piece **50** of the latching-slide **47** is depressed to move the retaining-aperture **51** thereof out of engagement with the retaining-finger **52** of the cover-plate **53**, after which the said latching-slide **47** may be longitudinally bodily moved outwardly into its unlatching position to shift the latching-lugs **46** thereof out of engagement with the notches **45** formed in the outer free ends **44** of the respective leaf-retaining loops **25** to **29** inclusive.

With the latching-lugs **46** disengaged from the notches **45** as just described, the leaf-retaining loop-unit **24** and the leaf-filing arm-unit **32** are free to be swung about their respective journals from the position shown in Fig. 4 into a temporary filing position as shown in Fig. 5. To swing the leaf-retaining unit **24** as just described, the finger-piece **42** of the leaf-filing arm-unit **32** is swung upwardly to correspondingly swing the said leaf-filing arm-unit about its journals, which movement will result, due to the abutting engagement of the outer free ends **44** of the respective leaf-retaining loops **25** to **29** inclusive and the outer free ends of the leaf-filing arms **33** to **37** inclusive in correspondingly swinging the leaf-retaining unit **24** bodily about its journals. In other words, the swinging of the finger-piece **42** upwardly will concurrently rock the leaf-filing arm-unit **32** and the leaf-retaining unit **24** about their respective journals upwardly through the clearance-slots **55** in the cover-plate **53** into the position shown in Fig. 5, in which figure the leaf-filing arm-unit **32** is shown in the position just described by broken lines. It will be readily apparent that the bowed character of the leaf-filing arms **33** to **37** inclusive will readily permit the said leaf-filing arms to be threaded or passed upwardly through the perforations of the leaves or sheets of the binder when the said leaf-filing arm-unit **32** is swung upwardly, as just described.

With the parts in the position just above described, a slight return movement of the finger-piece **42** will retire the leaf-filing arm-unit **32** into its filing position as shown by full lines in Fig. 5. The leaf-filing arm-unit **32** is held in its filing position by the frictional engagement of tongues **56** provided in the knuckles **23** before described and which bear upon the adjacent offset journal-portions **38—38** of the leaf-filing arm-unit **32**.

With the filing-arm unit **32** in the position it occupies in Fig. 5 by full lines, the leaf-filing arms **33**, **34**, **35**, **36** and **37** are in a substantially-perpendicular position relative to the cover-plate **53** with the respective outer free ends readily accessible and visible for the filing or threading thereon or the removal of leaves therefrom. As thus constructed and arranged, a slight swinging movement of the finger-piece **42** of the filing-arm unit **32** will move the said unit into its leaf-filing position or into its normal closed position (as indicated by broken lines in Fig. 5) in engagement with the leaf-retaining unit **24**, in which position the leaves of the binder may be moved onto the leaf-retaining loop-unit for retention thereby.

Upon the completion of the filing operation, the action of closing the binder will automatically move the leaf-retaining unit and the leaf-filing arm-unit from their temporary filing positions into their normal positions, with the leaf-filing arm-unit **32** located beneath the cover-plate **53**, as shown in Fig. 4. With the parts in this position, inward pressure upon the finger-piece **50** of the latching-slide **47** will move the said slide longitudinally to bring its latching-lugs **46** again into engagement with the notches **45** of the respective leaf-retaining loops to thereby latch the said leaf-retaining loop-unit **24** in its normal or closed position. The action of

sliding the latching-slide 47 inwardly into its latching position will have brought the retaining-aperture 51 thereof into position to permit the retaining-finger 52 of the cover-plate 53 to be entered into the said aperture 51 to thereby prevent the said action-slide 47 from being accidentally displaced or moved outwardly.

It may here be noted that the leaf-retaining loops 25 to 29 inclusive vary in length and that the respective leaf-filing arms are of a length to abut against the free ends of the said leaf-retaining loops to create a staggering effect of the abutting ends of the said leaf-filing arms and leaf-retaining loops. With the abutting ends of the leaf-retaining loops and leaf-filing arms staggered as just described, and as shown particularly well in Fig. 2, it will be readily apparent that, when the said leaf-retaining loops and leaf-filing arms are in the temporary filing positions shown in Figs. 2 and 5 of the drawings, the leaves or sheets of the binder may be readily passed over the said abutting ends without interference thereby. It will be noted that as the leaf passes by the abutting ends of the leaf-retaining loops of a given length, the said leaf will be guided by the unbroken surface of the adjacent loops to be thus guided by the abutting ends without interference thereby.

By the construction and arrangement of parts as herein shown and described, a loose-leaf binder is provided which may be utilized to its full capacity without undue strain upon the leaves contained therein and that the filing or removal thereof is readily accomplished with ease and readiness as the substantially-vertical filing-arms are readily available and visible to the user of the binder.

The invention may be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention, and the present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive, and all changes coming within the meaning and equivalency range of the appended claims are intended to be embraced therein.

I claim:

1. A loose-leaf binder including in combination: a frame; a leaf-holding loop pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; a leaf-filing arm also pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; said leaf-holding loop and said leaf-filing arm having independent movement to permit the normal abutment of said free ends or the separation thereof; and leaf-supporting means having an opening for the passage therethrough of both the said leaf-holding loop and the said leaf-filing arm; the said leaf-filing arm being constructed and arranged for projection above and also for normal substantially full retirement below the said leaf-supporting means, and the said leaf-holding loop being constructed and arranged for the projection of its free end below the said leaf-supporting means when the said leaf-filing arm is retired below the said leaf-supporting means.

2. A loose-leaf binder including in combination: a frame; a leaf-holding loop pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; a leaf-filing arm also pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; said leaf-holding loop and said leaf-filing arm having independent movement to permit the normal abutment of said free ends or the separation thereof; leaf-supporting means having an opening for the passage therethrough of both the said leaf-holding loop and the said leaf-filing arm; the said leaf-filing arm being constructed and arranged for projection above and also for normal substantially full retirement below the said leaf-supporting means, and the said leaf-holding loop being constructed and arranged for the projection of its free end below the said leaf-supporting means when the said leaf-filing arm is retired below the said leaf-supporting means; and operating means organized with the said leaf-filing arm for projecting the said leaf-filing arm from its normally substantially full retired position to a position above the said leaf-supporting means.

3. A loose-leaf binder including in combination: a frame; a leaf-holding loop pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; a leaf-filing arm also pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; said leaf-holding loop and said leaf-filing arm having independent movement to permit the normal abutment of said free ends or the separation thereof; leaf-supporting means having an opening for the passage therethrough of both the said leaf-holding loop and the said leaf-filing arm; the said leaf-filing arm being constructed and arranged for projection above and also for normal substantially-full retirement below the said leaf-supporting means, and the said leaf-holding loop being constructed and arranged for the projection of its free end below the said leaf-supporting means when the said leaf-filing arm is retired below the said leaf-supporting means; and releasable latching means constructed and arranged for releasably engaging the free end of the said leaf-holding loop when the free end of the latter is projected below the said leaf-supporting means.

4. A loose-leaf binder including in combination: a frame; a leaf-holding loop pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; a leaf-filing arm also pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; said leaf-holding loop and said leaf-filing arm having independent movement to permit the normal abutment of said free ends or the separation thereof; and leaf-supporting means having an opening for the passage therethrough of both the said leaf-holding loop and the said leaf-filing arm; the said leaf-filing arm being constructed and arranged for normal substantially full retirement below and also for projection above and substantially perpendicular to the said leaf-supporting means, and the said leaf-holding loop being constructed and arranged for the projection of its free end below the said leaf-supporting means when the said leaf-filing arm is retired below the said leaf-supporting means.

5. A loose-leaf binder including in combination: a frame; a leaf-holding loop pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; a leaf-filing arm also pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; said

leaf-holding loop and said leaf-filing arm having independent movement to permit the normal abutment of said free ends or the separation thereof; and leaf-supporting means having an opening for the passage therethrough of both the said leaf-holding loop and the said leaf-filing arm; the said leaf-filing arm being constructed and arranged for projection above and also for normal substantially full retirement below the said leaf-supporting means, and the said leaf-holding loop being constructed and arranged with its free end normally in abutting engagement with the free end of the said leaf-filing arm and for the projection of its free end below the said leaf-supporting means when the said leaf-filing arm is retired below the said leaf-supporting means.

6. A loose-leaf binder including in combination: a frame; a leaf-holding loop pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; a leaf-filing arm also pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; said leaf-holding loop and said leaf-filing arm having independent movement to permit the normal abutment of said free ends or the separation thereof; leaf-supporting means having an opening for the passage therethrough of both the said leaf-holding loop and the said leaf-filing arm; the said leaf-filing arm being constructed and arranged for projection above and also for normal substantially full retirement below the said leaf-supporting means, and the said leaf-holding loop being constructed and arranged with its free end normally in abutting engagement with the free end of the said leaf-filing arm and for the projection of its free end below the said leaf-supporting means when the said leaf-filing arm is retired below the said leaf-supporting means; and operating means organized with the said leaf-filing arm for projecting the latter above the said leaf-supporting means and for concurrently moving the said leaf-holding loop into a retired position.

7. A loose-leaf binder including in combination: a frame; leaf-supporting means having openings therein; leaf-holding loops pivoted to the said frame and having free ends for extension through perforations in leaves or sheets of paper and movable from a normal position into a retired filing position; leaf-filing arms also pivoted to the said frame and having free ends for extension through perforations in leaves or sheets of paper, said leaf-holding loops and said leaf-filing arms having independent movement to permit the normal abutment of said free ends or the separation thereof, and said leaf-filing arms being also movable from a normal retired position below the said leaf-supporting means into a leaf-filing position above the said leaf-supporting means, the said leaf-filing arms passing through the passages in the said leaf-supporting means; manually operable means organized with the said leaf-filing arms for moving the same into their leaf-filing position; and latching means for releasably latching the leaf-holding loops in their normal position.

8. A loose-leaf binder including in combination: a frame; a leaf-holding loop pivoted to the said frame for movement from a normal position into a retired position and having a free end for extension through perforations in leaves or sheets of paper; a leaf-filing arm also pivoted to the said frame and having a length substantially equal to or greater than the capacity of the binder and also having a free end for extension through perforations in leaves or sheets of paper; said leaf-holding loop and said leaf-filing arm having independent movement to permit the normal abutment of said free ends or the separation thereof; and leaf-supporting means having an opening for the passage therethrough of both the said leaf-holding loop and the said leaf-filing arm; the said leaf-filing arm being constructed and arranged for normal substantially full retirement below the said leaf-supporting means and projection above and substantially perpendicular to the said leaf-supporting means when the leaf-holding loop has been moved into its retired position.

9. A loose-leaf binder including in combination: a frame; a leaf-supporting means having openings therein; a leaf-holding loop, the center of the major radius of which is located in a plane below the upper surface of the said leaf-supporting means and having a free end for extension through perforations in leaves or sheets of paper; and a leaf-filing arm also pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; said leaf-holding loop and said leaf-filing arm having independent movement to permit the normal abutment of said free ends or the separation thereof; the said leaf-filing arm being constructed and arranged for normal substantially full retirement below and projection above and substantially perpendicular to the said leaf-supporting means, and the said leaf-holding loop being constructed and arranged for the projection of its free end below the said leaf-supporting means when the said leaf-filing arm is retired below the said leaf-supporting means, both the said leaf-holding loop and leaf-filing arm being movable through the openings of the leaf-supporting means.

10. A loose-leaf binder including in combination: a frame; a leaf-holding loop-unit pivoted to the said frame and having a plurality of leaf-holding loops having free ends for extension through perforations in leaves or sheets of paper; a leaf-filing arm-unit pivoted to the said frame and having a plurality of leaf-filing arms having free ends for extension through perforations in leaves or sheets of paper; said leaf-holding loop-unit and said leaf-filing arm-unit having independent movement to permit the normal abutment of said free ends or the separation thereof; and leaf-supporting means having openings for the passage therethrough of both the leaf-holding loops of the said leaf-holding loop-unit and the leaf-filing arms of the said leaf-filing arm-unit, the leaf-filing arms of the said leaf-filing unit being of different lengths, and the leaf-holding loops of the leaf-holding unit also being of different lengths, and constructed and arranged for normal engagement with the free ends of their respective leaf-filing arms.

11. A loose-leaf binder including in combination; a frame; a leaf-holding loop pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; a leaf-filing arm also pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper, the said leaf-filing arm being constructed and arranged substantially on a common center with the said leaf-holding loop for concurrent pivotal movement in at least one direction with the said leaf-holding loop and also for independent pivotal

movement relative to the said leaf-holding loop, the said leaf-holding loop being constructed and arranged with its free end normally in abutting engagement with the free end of the said leaf-filing arm; and manually-operable means organized with the said leaf-filing arm for concurrently moving the said leaf-filing arm and the said leaf-holding loop about their common center.

12. A loose-leaf binder including in combination: a frame; a leaf-holding loop pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper, and whose usable height exceeds one-half the usable distance between the loop side-portions; a leaf-filing arm also pivoted to the said frame and having a free end for extension through perforations in leaves or sheets of paper; said leaf-holding loop and said leaf-filing arm having independent movement to permit the normal abutment of said free ends or the separation thereof; and leaf-supporting means having an opening for the passage therethrough of both the said leaf-holding loop and the said leaf-filing arm; the said leaf-filing arm being constructed and arranged for projection above and also for normal substantially-full retirement below the said leaf-supporting means, and the said leaf-holding loop being constructed and arranged for the projection of its free end below the said leaf-supporting means when the said leaf-filing arm is retired below the said leaf-supporting means.

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