J. C. DAWSON.

LOOSE SHEET HOLDER.

APPLICATION FILED OCT. 23, 1909.

955,325. Patented Apr. 19, 1910.

Fig. 3.

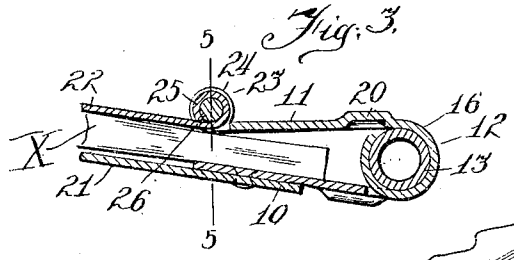


Fig. 1.

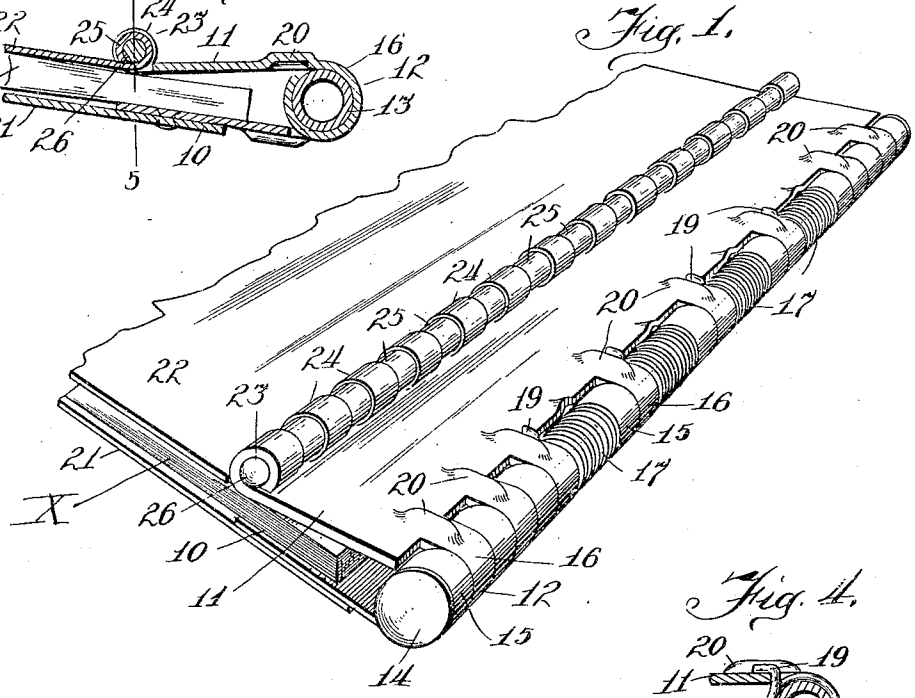


Fig. 4.

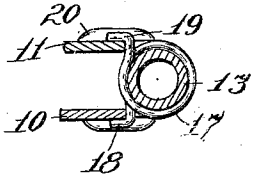


Fig. 2.

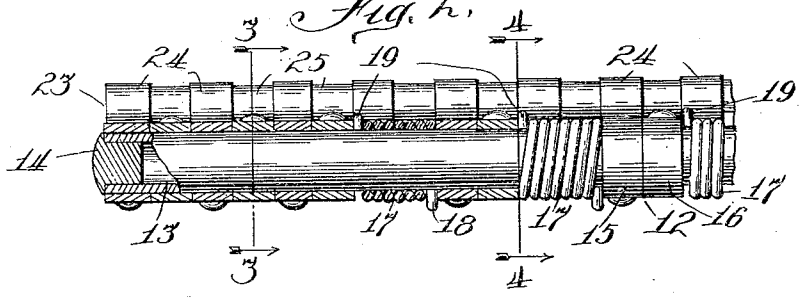
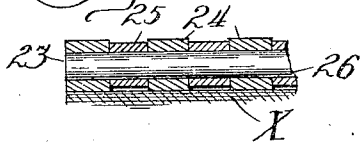


Fig. 5.



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LOOSE-SHEET HOLDER.

955,325. Specification of Letters Patent. **Patented Apr. 19, 1910.**

Application filed October 23, 1909. Serial No. 524,244.

To all whom it may concern:

Be it known that I, JAMES C. DAWSON, a citizen of the United States, and resident of Webster Groves, county of St. Louis, and State of Missouri, have invented a certain new and useful Improvement in Loose-Sheet Holders, of which the following is a specification, and which is illustrated in the accompanying drawings, forming a part thereof.

The invention relates to holders for loose sheets of the form adapted to grip the sheets along one edge and to provide openable covers for protecting the sheets while admitting of their being inspected without removal from the holder.

The object of the invention is to provide a holder of the type described which shall be of improved construction, and the invention is exemplified in the structure to be hereinafter described and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing a loose sheet holder embodying the features of improvement provided by the invention; Fig. 2 is a sectional view taken through the hinge employed for uniting the clamping members of the structure illustrated in Fig. 1; Figs. 3 and 4 are sectional views taken on the lines 3—3 and 4—4 of Fig. 2; and Fig. 5 is a detail sectional view taken on the line 5—5 of Fig. 3.

The structure illustrated in the drawings comprises a pair of clamping members 10, 11, adapted to grip the sheets to be held along one edge. These members are united at one side by a spring hinge generally designated by the numeral 12. The hinge 12 is preferably of improved construction and formed without having hinge members riveted to the clamping plates 10, 11, as has heretofore been the common practice in binders of this kind. As shown, the pintle of the hinge takes the form of a metal tube 13 having its ends closed by plugs, as 14. For completing the hinge, the clamping plates 10, 11 are each provided with lugs, as 15, 16, formed integral therewith and arranged in staggered relation on the two plates. These lugs are formed into eyes for receiving the tubular pintle 13 of the hinge. For compressing the plates 10, 11 together, to cause them to grip the sheets placed therebetween, coil springs, as 17, located at intervals along the tube 13, are employed, the ends of these wire springs being overturned to bear upon the plates, as most clearly shown at 18, 19, (Fig. 4).

The lugs 15, 16 on the clamping plates 10, 11, are omitted at intervals to provide room on the pintle 13 for the springs 17, and preferably each of these lugs is stiffened by having a boss 20 (Figs. 1 and 3) formed therein adjacent its inner end, thereby giving that part of the lug a channeled form in cross-section.

The bosses 20 are preferably made greater in height than the diameter of the overturned ends 18, 19 of the coil springs 17, and thus also serve as a protection for preventing these overturned ends of wire from coming in contact with the table or other article upon which the device is permitted to rest.

To provide covers for the sheets gripped by the holder, the clamping plates 10, 11 are preferably provided with extensions, as 21, 22, substantially equal in size to the size of the sheets to be bound. As is usual in devices of this kind, one of these extensions, as 21, will be formed integral with, or secured to, the clamping plate, as 10, to which it is applied, and constitutes a back plate or support for the sheets if writing is to be done on them. The other extension, as 22, is hinged to the free edge of the clamping plate 11, as at 23 (Fig. 1) to permit an inspection of the sheets bound in the device without removing them from it. The hinge 23 is preferably of the so-called piano-case form, and comprises lugs, as 24, 25 formed upon the adjacent edges of the plate 11 and the clamping plate 22, respectively, in staggered relation, such lugs being turned into eyes for receiving a pintle 26.

In order that the free edge of the clamping plate 11 may bear firmly upon the sheets X to be bound, while still permitting the hinge 23 to be readily flexed, the plate 11 is preferably of greater thickness than the extension or hinged cover 22. The lugs 25 provided upon the extension are thus held out of contact with the sheets X, by the greater thickness of the lugs 24 formed on the plate 11, as most clearly shown in Fig. 5 of the drawings, and may be turned upon the pintle 26 during the swinging of the cover section 22, without frictional engagement with the sheets.

I claim as my invention:—

1. In a loose sheet holder, in combination,

a back plate, a sectional top plate, a spring hinge connecting the said plates along one edge, and a hinge connecting the sections of the top plate, such hinge comprising a pintle extending from side to side of the plate, and lugs formed in staggered relation upon the adjacent edges of the sections turned into eyes about the pintle, the lugs of the outer section being of less thickness than the lugs of the inner section.

2. In a loose sheet holder, in combination, a back plate, a sectional cover plate, a spring hinge connecting the said plates along one edge, the sections of the cover plate being of different thickness, and that section remote from the spring hinge being the thinner, and a hinge connecting the sections of the cover plate, the said hinge comprising a pintle and eyes formed by overturning the adjacent edges of the sections surrounding the pintle.

3. In combination, a pressure plate for loose sheet holders, a cover plate extending beyond the edge of the pressure plate, and a hinge uniting the said pressure plate and cover plate comprising a pintle and eyes formed upon the adjacent edges of the cover plate and pressure plate for receiving the pintle, the external diameter of the eyes formed on the cover plate being less than the external diameter of the eyes formed on the pressure plate.

4. In a loose sheet holder, in combination, a pair of clamping plates, a hinge uniting the said plates at one edge, the said hinge comprising a pintle and eyes surrounding the pintle formed from lugs provided upon the edges of both of the plates, and a spring surrounding the pintle and having its ends bearing upon the outer face of the clamping plates adjacent the inner ends of the said lugs, and the said inner ends of the lugs being provided with bosses of channel form of greater height than the thickness of the said ends of the spring.

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