C. STUDER.

FILING CABINET.

APPLICATION FILED FEB. 26, 1920.

1,381,361. **Patented June 14, 1921.**

2 SHEETS—SHEET 1.

Fig. 1

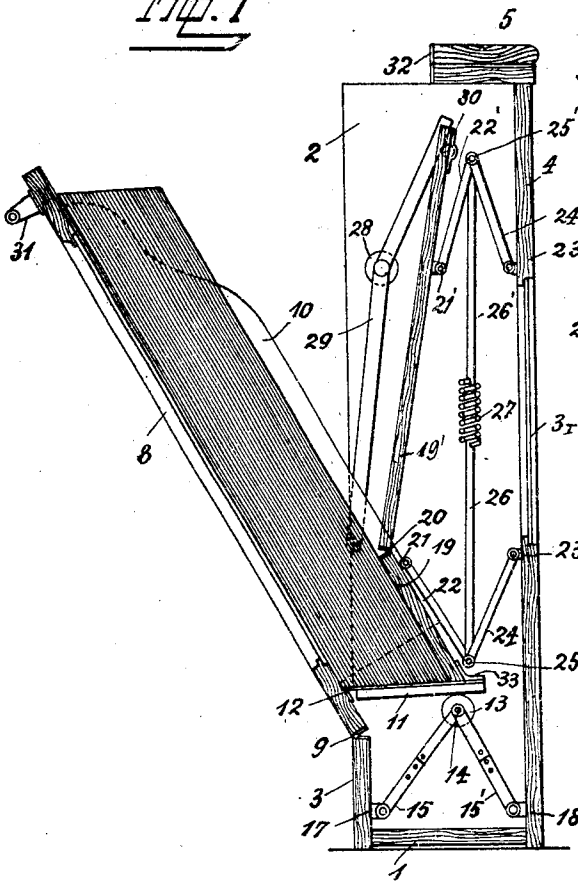


Fig. 2

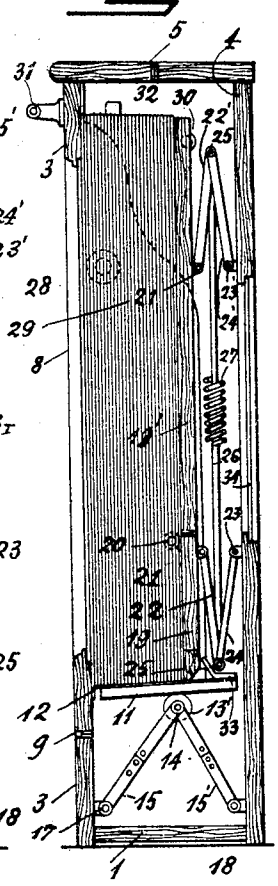
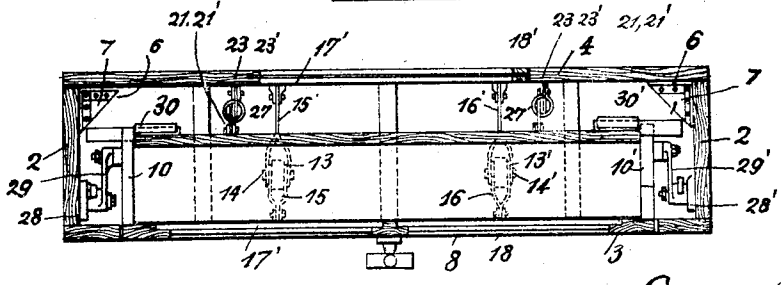


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4

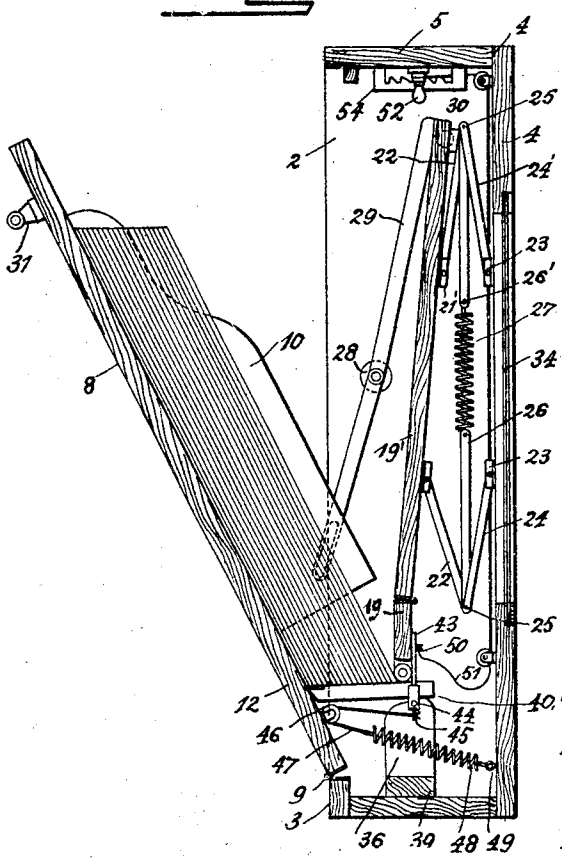


Fig. 5

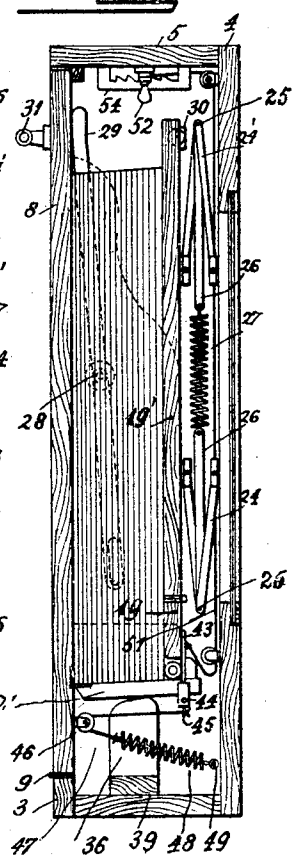
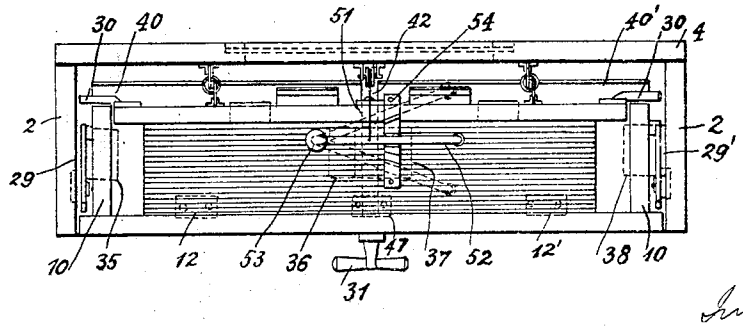


Fig. 6



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UNITED STATES PATENT OFFICE.

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FILING-CABINET.

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Application filed February 26, 1920. Serial No. 361,566.

To all whom it may concern:

Be it known that I, CASPAR STUDER, a citizen of the Swiss Confederation, and residing at Winterthur, Switzerland, have invented certain new and useful Improvements in Filing-Cabinets, of which the following is a specification.

The present invention has reference to certain new and useful improvements in filing cabinets, and relates more specially to a novel construction of a cabinet or case for filing letters, drawings and the like in which several drawbacks found in prior constructions are effectively obviated. In similar appliances the objects filed are held pressed against the cabinet door even when in open position with the result that the particular sheets wanted cannot readily be removed and also are liable to be torn. Other constructions, in which the contents are released, upon the front being opened, have the drawback that the individual sheets not being properly supported or backed, collapse and are then, on the case being closed again, creased or crumpled and difficult to locate.

These and other defects of prior constructions are done away with in the present invention by providing a pressure plate or sheet support composed of at least two operatively connected parts, which plate in turn is supported on a bottom plate pivotally or hingedly secured in front to the hinged cabinet front wall or door. On opening the latter the upper part of this pressure plate withdraws from the file contents, while the lower portion is pressed home on the contents under the influence of a spring controlled lever mechanism. This arrangement effectively prevents the individual sheets from collapsing and also prevents single sheets from adhering to the hinged floor plate.

The invention will best be understood when described in connection with the accompanying drawings, in which—

Figure 1 represents a vertical section through the new cabinet with opened front,

Fig. 2 is a similar section in closed state,

Fig. 3 is a plan view partly in section and

Figs. 4, 5 and 6 respectively show similar sections and plan views of a constructional modification.

Referring first to Figs. 1–3, the cabinet comprises the bottom 1, the side walls 2, the front wall 3, the rear wall 4 and the top 5. For stiffening the casing there are provided angle members 6 (Fig. 3) and brace plates 7. The front door is in the shape of a drop door 8 hinged at 9. To the inside of the door 8 are secured at the two vertical edges the side members 10, 10′, which with the door and the floor plate 11 form a receptacle for receiving the unperforated sheets to be filed. The floor plate 11 is pivotally secured to the door by means of the hinges 12 and is supported on rollers 13, 13′ respectively journaled at 14 and 14′ in carrier pairs 15 and 15′ and 16, 16′ whose lower ends are pivotally secured to bracket members 17, 17′ and 18, 18′ respectively extending from the front and rear casing wall. The carrier members 15, 15′ and 16, 16′ are two part and can be extended or shortened within certain limits. The pressure plate 19 is made up of two leaves which are connected by the hinges 20. From both leaves respectively extend short brackets 21, 21′ to which the one end of links 22, 22′ is pivotally secured. To the rear wall 4 of the case are pivoted at 23 and 23′ respectively the links 24, 24′ the other ends of which are hingedly connected by cross-pins 25, 25′ to the links 22, 22′. To these cross-pins are also pivoted the respective outer ends of two alined draw-rods 26, 26′, whose inner ends are elastically connected by means of a helical spring 27. In bearings 28, 28′ secured to the respective casewalls 2 are journaled the rocklevers 29, 29′, whose side edges are connected by a pin and slot connection to the respective side members 10, 10′, while their other ends, on the door being opened, contact with the stops 30, 30′ on the upper pressure plate leaf 19′. The door 8 is provided with a handle 31. The top 5 of the case preferably is composed of two portions connected by a hinge 32. The floor plate 11 is provided with a stop 33 for the lower pressure plate leaf 19. The back 4 is provided with a readily removable access plate 34.

In the constructional modification illustrated in the Figs. 4, 5 and 6 like parts are designated by like reference numerals. The rollers 13, 13′ and their supports are here replaced by supports 35, 36, 37 and 38 of which the two supports 35 and 38 rigidly extend from the side walls of the case, while the supports 36 and 37 are connected by a plate 39, which latter is rigidly secured to the case bottom. The floor of this modification is formed of two sections 40 and 40′,

which respectively are pivoted to the door by means of the hinges 12, 12′ and the double hinge 41. Between the two floor sections 40 and 40′ there is left a space 42 (Fig. 6) into which extends an arm 43 rigidly extending from the lower part of the pressure plate 19. This arm 43 carries a bolt 44 extending from the two sides of the arm underneath the floor sections 40, 40′ and provided at its free end with an edge 45 to which is secured the one end of a string or a wire 47 which passes over a guide roller 46 journaled on the door 8 and whose other end is secured to the one end of a spring 48 (Figs. 4 and 5) the other end of which is in turn attached to an eye 49 fixed to the case back. To the arm 43 is secured an eye 50 to which is secured a string 51, whose other end is secured to a lever 52. The latter lever is pivoted to the case top 5 and can be shifted and locked by coöperating with a toothed segment 54.

Under the influence of the spring 48 the lower section 19 of the pressure plate has the tendency to pressingly act toward the filed sheets, the pressure being readily relieved by the lever 52 together with the rack segment 54.

The operation of the described filing appliance is the following:

For filing away letters, drawings and the like or for removing previously filed objects from the case the door 8 is opened by pulling on the handle 31, when the upper section 19′ of the pressure plate will recede from the filed contents while the lower section 19 remains in pressing contact therewith. The rock levers 29, 29′ support the tilted receptacle in the open position. (Fig. 1). Owing to the elastic connection between the several links and drawrods the pressure plate will always be pressed against the file contents, no matter what the thickness of the pile be and with sufficient pressure to prevent the contents from becoming wrinkled and creased.

What I claim is:

1. In a filing cabinet for unperforated letters, drawings and the like, including a forwardly tiltable door serving as receptacle for the filed objects, the feature that the file contents are acted on by a pressure plate composed of at least two hingedly interconnected leaves or sections, said pressure plate being supported below by a floor plate hingedly connected in front to said tiltable door, the upper section of said pressure plate on opening of the door being withheld from further contact with the file contents and its lower section held pressed against the contents and toward said hinged floor plate by the intermediary of a spring influenced link and drawrod-mechanism.

2. In a filing cabinet constructed in accordance with claim 1, and further characterized by the fact that the upper section of the pressure plate is withdrawn out of contact with the file contents by means of rock levers 29, 29′ fulcrumed to the case walls and pivoted below to the tiltable door receptacle.

3. In a filing cabinet constructed according to claim 2 and further characterized by the feature of having an elastic mechanism acting on the pressure plate includes pairs of link members, pivotally connected to the rear case wall and to the pressure plate, and alined drawrods, interconnected by means of springs.

4. In a filing cabinet constructed according to claim 3 and further characterized by the feature that the lower section of the pressure plate is under the influence of a spring which has the tendency to force said section toward the file contents.

In testimony whereof I have affixed my signature in presence of two witnesses.

CASPAR STUDER.

Witnesses:
O. M. Anrig,
J. Atler Boss.