W. KIRCHNER.

RAPID FILE LETTER FILE OR DOCUMENT HOLDER.

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1,330,270.

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Fig. 1.

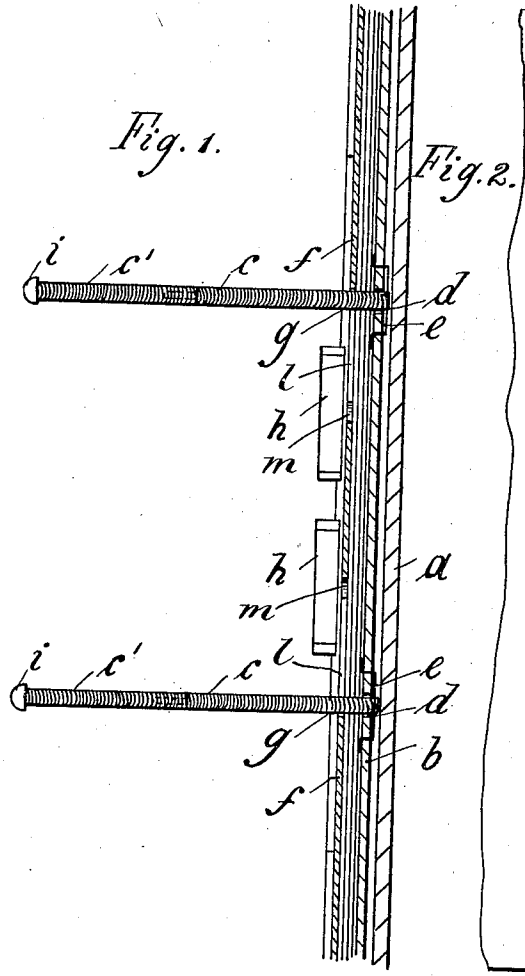


Fig. 2.

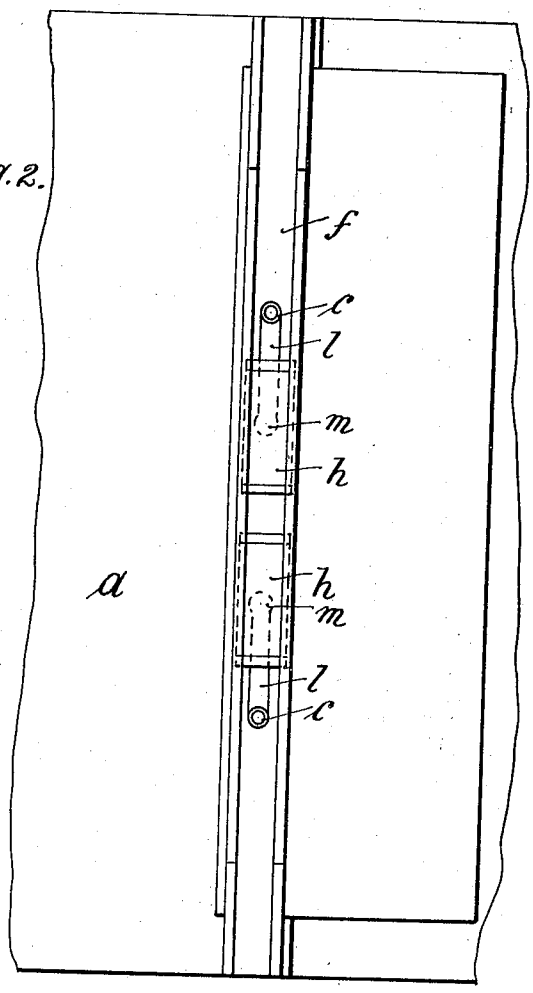
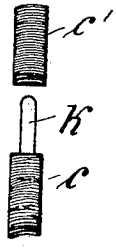


Fig. 3.



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UNITED STATES PATENT OFFICE.

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RAPID-FILE LETTER-FILE OR DOCUMENT-HOLDER.

1,330,270. Specification of Letters Patent. Patented Feb. 10, 1920.

Application filed August 12, 1919. Serial No. 317,056.

To all whom it may concern:

Be it known that I, WILHELM KIRCHNER, a subject of the Republic Germany, residing at the city of Stettin, Germany, have invented certain new and useful Improvements in Rapid-File Letter-File or Document-Holders, of which the following is a specification.

My invention relates to a rapid file, letter file or document holder for filing letters, documents and the like.

Files of the kind mentioned are already known, with which the filing members are flexible from the point at which they are secured to the file to their extreme end and which may be separated in their middle and again coupled together by means of a strong, detachable lock. The chief advantage of this kind of file consists therein that the filing members may be better utilized and that the area of the leaves or sheets files may be visible to its full extent. The said sheets filed may be turned over like the leaves of a book.

With the file according to my present invention this flexibility of the filing member has been maintained; the improvement consists in said filing members being made of metal spirals.

Compared with cords heretofore employed, these spiral members have the advantage that they will remain erect and thereby facilitate the filing, while they can be easily bent down when required. They thus combine flexibility with a vertical erectness. The said spirals, furthermore, allow of a very simple and reliable lock or coupling in the middle of the filing members, where these are separated; such coupling preferably consists of a pin secured to the one end of the spiral and fitting into the other end in such a manner that it may be introduced only after the last turns of the spiral have been opened. When the pin has been introduced and the spiral wire is released, these last spiral turns will close up again and securely hold the pin, so that the latter cannot be drawn out without the same last turns being again opened. If it be attempted to withdraw the pin without opening the said turns, the latter will even clasp the pin more tightly, the more the pin is pulled. Owing to its even, circular section the spiral will, besides, allow of shifting the sheets or leaves more easily.

The feature of the present invention consists in the filing members being made of metal spirals which are, at one end secured or otherwise connected to the file cover so that they pass clear through a part of the same while at their other end they are free or, if desirable, fitted with buttons. These spirals are divided intermediate their ends, and at the point where they are separated a coupling is provided to allow of the thus separated portions being again coupled together. This coupling is obtained in the following manner: Into the end of the one piece of the spiral is tightly fitted a pin; this pin is of such diameter that it may be inserted into the end of the opposite piece of spiral only after the last turns of the latter have been opened a little; when once thus inserted it can also be only withdrawn again after the said last turns have been likewise opened.

In the accompanying drawing a file according to the present invention is illustrated.

Figure 1 is a sectional view showing the file and the covering bar in section.

Fig. 2 is a top view showing the filing members (the spirals) in section.

Fig. 3 is an enlarged view of the coupling.

In these drawings *a* is the file cover, *b* is the part of the cover or support to which the filing members, the spirals *c*, *c* are secured.

This may be obtained by passing the said spirals *c*, *c* through holes *d*, *d* in the cover *b* and engaging a small plate *e* in the last turn of the spiral. The plate *e* may also be sunk into the cover *b*. When thus fitted the spirals will stand erect on the cover the plate *e* acting as a foot bearing against the cover. *f* is the covering bar, having holes *g*, *g* through which the spirals *c*, *c* pass. When the filing of a paper or papers has been effected, the spiral members may be bent down onto the covering bar *f* by means of sleeves *h*, *h*, which are slidably mounted on the bar between the spiral members and adapted to slide over and embrace the free portions of the latter.

The spirals *c* are composed of two portions, namely a lower one secured to the cover and an upper one *e* preferably ending at the upper end in buttons *i*, *i*. Into one of these portions a small pin *k* (Fig. 3) is fitted; for example by means of soldering. This pin *k* is of such a diameter that it will

just fit into the opposite spiral when the last turns of the latter have been previously slightly opened or unwound.

After the pin *k* has been introduced into the thus opened spiral and the latter has been released, the pin can no more be withdrawn by simply pulling at it in an axial sense relatively to the spiral, as the spiral which under such pull will close up, will cling more and more tightly to the pin inserted into it. For undoing the coupling the spiral has to be again slightly untwisted, so that it is slightly widened, until the pin may be withdrawn.

Besides the holes *g*, *g* in cover member *f* through which the spirals *c*, *c* pass, further holes *m*, *m* are provided communicating with holes *g*, *g* by slots *l l;* these holes *m*, *m* are of such diameter that the buttons *i*, *i* will freely pass through them.

The object of this arrangement is to enable the covering bar to be lifted off the spirals. The buttons *i*, *i* on the spirals, which are intended to prevent the covering bar from slipping off, are of such a size, that they will pass freely through the holes *m*, *m* but not through the holes *g*, *g*. The bar may therefore be passed over the buttons *i*, *i* with the holes *m*, *m* while it will be retained by said buttons when moving with the holes *g*, *g* on the spirals. This allows of filing or removing sheets from the top of the file without undoing the coupling, by merely removing the covering bar.

The operation of filing sheets is very simple: The one half of the spirals *c'*, *c'* is slightly turned in the direction of the twist, so that the spiral is thereby slightly widened. Therefore the pins *k*, *k* are released and the spirals *c'*, *c'* may be withdrawn. The spirals *c*, *c* will now be standing erect on the cover ready to receive the sheets to be filed, which may be done without the spirals having to be held up. The pins *k*, *k* are then again inserted into the spirals *c'*, *c'* after slightly untwisting these, and the coupling is closed. Sheets are removed from the file by performing the just described operations in the opposite order.

When the filled file is opened like a book, for turning over the various sheets filed therein on reading from them, the small slides *h*, *h* will allow sufficient play to the spirals so that all sheets may be inspected over their whole area.

After the file has again been closed, a slight pressure on the bar will be sufficient to tightly press the same against the sheets, as the spirals glide in the body of the small slides.

I claim:

1. A document file comprising a support, metal spiral filing members mounted therein in perpendicular relation thereto, each filing member consisting of two sections detachably connected together.

2. In an arrangement for filing letters, documents and printed matter the combination of a stiff cover with metal spirals as filing members for the sheets to be filed, said spirals attached at one end to said cover and standing erect thereon and consisting of two sections coupled by means of a detachable coupling.

3. In an arrangement for filing letters, documents and printed matter the combination of a stiff cover with metal spirals as filing members for the sheets to be filed, said spirals attached at one end to said cover and standing erect thereon and consisting of two almost equal sections coupled by means of a detachable coupling consisting of a pin fitted into the one section and of such a diameter that it will just fit into the opposite section.

4. In an arrangement for filing letters, documents and printed matter the combination of a stiff cover with metal spirals as filing members for the sheets to be filed, said spirals attached at one end to said cover and standing erect on said cover and having buttons on their free ends, and a covering bar having holes for receiving the said spirals and slots communicating with said holes and terminating in larger holes through which the buttons can pass.

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

WILHELM KIRCHNER.

Witnesses:
Frau Fanny Thomlinski,
Gren. Abaso Broner.