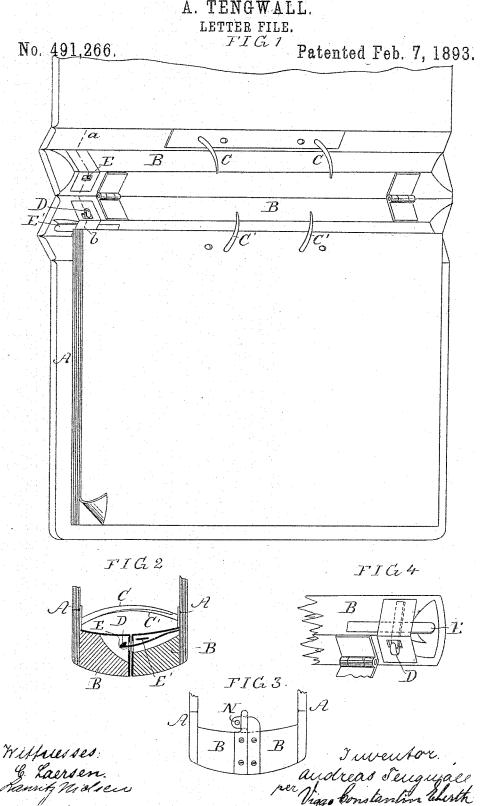
## A. TENGWALL.



## UNITED STATES PATENT

ANDREAS TENGWALL, OF HELSINGBORG, SWEDEN.

## LETTER-FILE.

SPECIFICATION forming part of Letters Patent No. 491,266, dated February 7, 1893. Application filed October 15, 1890. Serial No. 368,170. (No model.) Patented in Sweden March 30, 1889, No. 2,831.

To all whom it may concern:

Be it known that I, ANDREAS TENGWALL, a subject of the King of Sweden and Norway, residing at Helsingborg, in the Kingdom of 5 Sweden, have invented certain new and useful Improvements in Letter-Files, (for which I have received Swedish Patent No. 2,331, dated March 30, 1889;) and I do hereby declare the following to be a full, clear, and exact de-10 scription of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to a loose band-letter file-for the purpose of holding letters, rec-

15 ords and similar papers.

In the accompanying drawings Figure 1. is a perspective view of my letter file. The band is opened, and shown with the letters placed inside. Fig. 2. is a cross section in enlarged 20 scale on the line a-b in Fig. 1. The band is however shown here in a closed position. Fig. 3. shows a modification of the closing mechanism and Fig. 4. is an enlarged representa-

tion of the closing mechanism in Fig. 1.

The two covers A of the improved file are fixed to a back made of two parts or halves B which are provided with linges for enabling the back to be opened in the same direction as the file. Both parts or halves of the back 30 have rigid edges to which the covers are fixed in such a manner that the latter can be opened independently of the back. On the inner surface of these edges are secured pins or prongs C and C' bent to the same curve as the circle 35 which they describe when the back is opened or closed. Two or more pins or prongs arranged on each side of the back so that the letters or other papers provided with suitable holes will be held by four or more such pins 40 or prongs whon the back is closed, as soon as the back is opened the pins or prongs will recede from each other.

For taking a letter from the file the latter is first opened like an ordinary book, the 45 leaves being parted at the point where the desired letter is placed, when the back is now opened the letters on either side will be carried away with the cover, whereon they are lying being held together in proper order by 50 the said pins or prongs C and C'. In this manner a letter can be readily taken from the

with great facility. The two parts or halves of the aforesaid back are kept closed by any suitable locking device, such as, for instance 55 one or more spiral spring bars or hook springs. These may either be firmly connected with the back, or arranged to be applied separately. In case the parts or halves of the back are to be locked through the medium of a spring 60 hook D the latter may be secured to one of these parts or halves, this hook being arranged in such a manner that when the back is closed it will engage with a suitable cavity E formed in the other part or half. A spring 65 E'—see Figs. 1,2 and 4—operated by pressure serves to release the aforesaid hook for enabling the back to be opened. The closing mechanism is in that case fixed close to the one end of the back and is opened by the free end of 70 the spring E' being acted upon, which end projects outside the lower edge of the backsee Fig. 1.

Another arrangement, whereby the back can be kept closed is shown in Fig. 3. The 75 outer one walled side of the one half of the hasp, is provided with an eye N, which, when the back is closed, passes through an aperture in the second half of the hasp. A metal pina rigid clamp of steel wire—is then passed 80 through this eye, in such manner that the back can only be opened when this pin is removed.

The above described devices for locking the two parts or halves of the file are only described by way of example, as the same ob- 85 ject can be effected by any other suitable means.

The improved file can be used either for collecting or keeping letters or other papers. In the former case a metallic bar is employed ob which has two or more pins or prongs adapted to pass through the holes in the letters or other paper when the file is opened. The entire collection of letters or other papers can then be easily taken out and placed in an- 95 other file for keeping them, which may be constructed in the above or any other suitable manner. The bent pins or prongs above mentioned can be fixed in various manners; for instance, directly upon the parts or halves of 100 the back or upon a metallic bar which is either secured to the back or slid under ledges and hooks fixed to the back so that the hook is held file, while its insertion is similarly effected ! by friction or by a spring or other means.

Having fully described my invention, what I desire to claim and secure by Letters Pat-

1. A letter file comprising a divided back, 5 hinges connecting the back sections, rigid strips secured to said back sections, covers flexibly attached to said rigid strips, plates or bars carrying curved impaling prongs con-nected to the insides of the rigid strips, and

10 a spring lock or latch secured to the inside of the divided back, to hold the back sections in a closed position, one of said back sections carrying the projecting hook or holt and thumb piece of the lock, and the other section laying a catch for said hook or bolt, all sub-

stantially as described.

2. A letter file provided with a divided back and hinges for connecting the same, combined with means for holding the back closed rigidly, consisting of a spring hook secured to co one division of the back and a catch located in a cavity in the other division, and a spring thumb-piece to operate the hook extending across the same to the end of one side of the back of the file, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

ANDREAS TENGWALL.

Witnesses:

A. V. RUNGE, A. C. HAUNSTRUP.