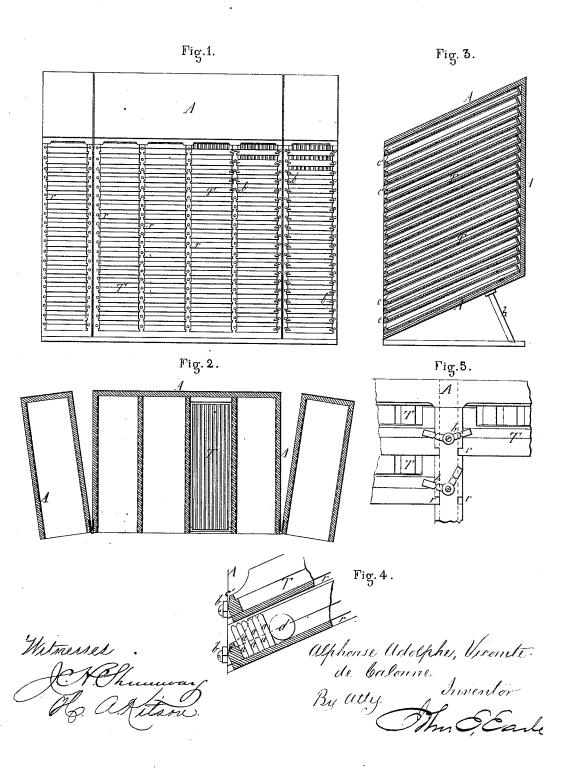
## A. A. V. De CALONNE TYPE-CASE

No. 195,806.

Patented Oct. 2, 1877.



## UNITED STATES PATENT OFFICE.

ALPHONSE ADOLPHE VICOMTE DE CALONNE, OF PARIS, FRANCE.

## IMPROVEMENT IN TYPE-CASES.

Specification forming part of Letters Patent No. 195,806, dated October 2, 1877; application filed August 30, 1877.

To all whom it may concern:

Be it known that I, ALPHONSE ADOLPHE VICOMTE DE CALONNÉ, of Paris, France, have invented a new Vertical Case for Typographical Composing, of which the following is a specification:

The new typographical case, which is the subject of the present application for patent, differs essentially from all cases used hereto-

It presents the types according to a vertical plan, classed, numbered, so that a person the most ignorant of typographical art can, after a short experience, compose with the greatest celerity. It permits the use of double letters, triple, quadruple, fivefold, united in the same type, and even whole words most commonly

The case is formed of one or several boxes, in wood or metal, in which slide inclined drawers, one over the other. These drawers are divided into as many lengthwise compartments as it is necessary, according to the classification of types or the kind of work to be done and the language used. These long compartments have a breadth proportioned to the size of the type in use. They are furnished at the bottom with plates of polished metal, or, better still, of glass, as offering less friction; they can, however, be made of wood.

The types are placed standing in the compartments, like types together, one after the

other, the letter up.

My vertical case is represented by elevation, Figure 1; by horizontal section, Fig. 2; and transverse section, Fig. 3. Fig. 4 shows, in half-size, the portion of drawers near the stops, which keep them in place. Fig. 5 is a front view of a portion of the drawers near the edge:

A is the case, which contains drawers T. The drawers must be placed at an angle of inclination sufficient to permit types to slide easily by their own gravity, and not to weigh heavily upon one another. This inclination may be regulated by the support h, with which the case A may be furnished in the posterior part. (See Fig. 3.)

The drawers T are movable, and can at will be pulled out of the case, in which they slide

upon an inclined plane, or upon polished blocks, or, as in the drawing, in grooves r.

When the case is prepared for the work of composition, these drawers are retained between the side walls by pivoted crotchets b. Part of these crotchets are represented upon Fig. 1. Fig. 4 gives the details in half dimension.

The drawers, having only the sufficient height for the types to slide naturally, and for the fingers to seize them, they occupy little space in height. They are arranged one above another, about twenty of them, according to the adopted method for the classification of simple or multiple types, or according to the kind of work to be done. One has, therefore, one chest or a series of combined chests, of which the extent cannot exceed ninety centimeters in height, and not one meter in length. The front of the drawers is less than the height of the type, and chamfered back at the bottom, so that the compositor can easily take the first type presented, and without liability of displacing the next.

To maintain types in their normal position, and to prevent their tumbling, a lead disk, d, a little less than the breadth of the compartment in which it must roll, and of a diameter of fifteen to twenty millimeters, is placed behind the types, and presses toward the front

or lower part of the drawer.

The case is put upon a table or a wooden or iron stand. The workman has before him, in a vertical case, and in a small space, all the types he needs. He has them at hand, before his eyes, under his hand, and without the necessity of reaching the arm too far, without leaning of the body. He works without fatigue or effort.

To make the work still more easy, and make it accessible to every person, even to a stranger of typographical art, each drawer bears stamped upon the front the simple or composed type which the corresponding compartment contains. These show-types are enameled. They may be also painted or printed. Simple types, composed types, whole words are, besides, methodically distinguished by the color given to the show-type.

In order that the inscriptions may be better

placed in sight, the front of the drawers is inclined inward, as at c c'.

Exceptional letters, great and small capitals, signs, and Italics are placed in two lateral type-cases, so as to leave the middle cases the most accessible of all for the most common types. Spaces, blanks, small blanks, lead-lines are put in a small ordinary case, placed horizontally upon a table before the vertical case. The "copy" is put upon a little stand united by means of an articulated arm with the left case, so as not to hide the drawers of the case.

Work is done, as usual, with a composing-rule. The hand raises the letter, inclining it lightly behind to disengage the pressure. As soon as a type is taken out, another type of same species takes its place by sliding lightly upon the glass bottom or the wooden one of the compartment.

Distribution is made by an inverse modus operandi. The hand places successively the types in their respective cases in moving them up back in their compartments; but to render this work more easy, one lessens the angle of declivity of the drawers in lowering the case on the back.

The following points are distinctive marks of my vertical case for typographical use: First, a very great number of cases are grouped together in a small space, and according to a vertical plan; second, it presents the type automatically through sliding upon an inclined plane in polished metal, in glass, or simply in wood; third, according to methodical order, but nevertheless variable, according to the needs of the one who uses it; fourth, it indicates, through inscriptions, the type the workman must raise; fifth, it permits, for the first time, by the ensemble of these realized conditions, the easy and rapid use of compound types, of all combined words, and even of complete sentences; sixth, it makes typographical composition possible to persons unacquainted with this art.

I can modify the forms and dimensions of my case, and make it of various materials.

I claim-

The herein-described typographical composing-case, consisting of one or more vertical series of drawers inclining downward to the front, and each drawer constructed with a series of grooves terminating at the front, the lower end of the grooves of one drawer exposed below the front of the next drawer above, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification before two subscribing wit-

V'TE DE CALONNE.

Witnesses: ROBT. M. HOOPER, Armengaud, Jeune.