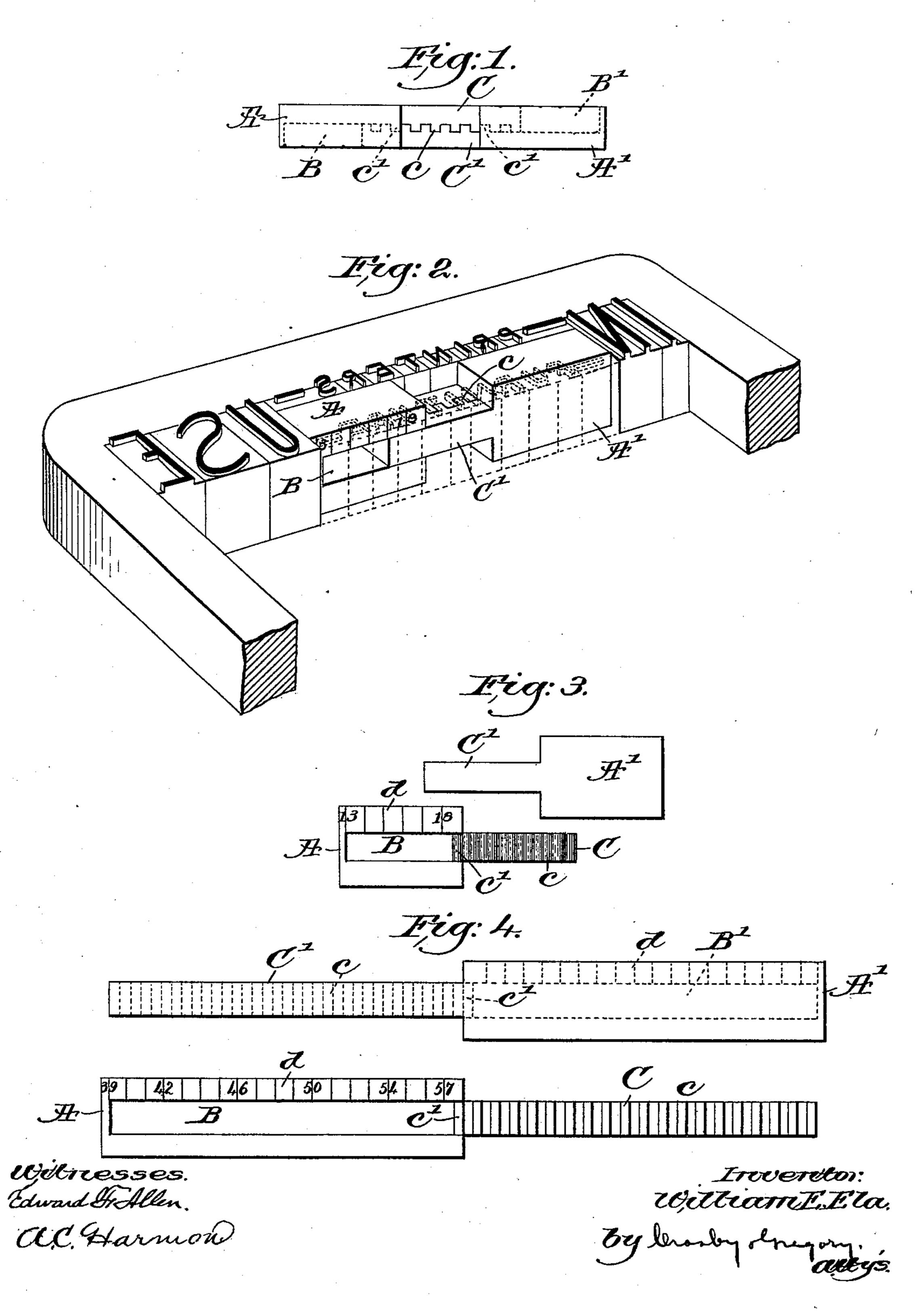
W. E. ELA.
EXTENSION FURNITURE FOR PRINTERS.

No. 584,994.

Patented June 22, 1897.



## United States Patent Office.

WILLIAM E. ELA, OF SOMERVILLE, MASSACHUSETTS.

## EXTENSION FURNITURE FOR PRINTERS.

SPECIFICATION forming part of Letters Patent No. 584,994, dated June 22, 1897.

Application filed November 7, 1896. Serial No. 611,389. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. ELA, of Somerville, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Extension Furniture for Printers, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings

representing like parts.

In setting type, particularly in display composition, it is the present practice to fill in the blank spaces with quads or quotations and with wooden furniture, the type being set and then properly positioned and spaced 15 by inserting a large number of the quads, &c., one after the other, until all the blank space is accurately blocked or filled in solidly. This consumes time, requires patience and experience, and is, moreover, objectionable, 20 because the quads, &c., will work loose more or less in the constant jarring and movement of the press and the wooden furniture will shrink or warp and become rounded on the corners. Accordingly, with a view to obviat-25 ing all these objectionable features, I have invented the hereinafter-described extension furniture, by means of which the compositor's time is saved, office-room and cost of material are economized, uniformity and accuracy of 30 blanking is secured, and there is no longer any liability to work loose, as heretofore, due to the number of quads, &c., which it has been necessary to employ.

By my invention one piece of furniture 35 takes the place of a large number and variety of quads. It consists of two parts fitted to each other, as claimed, and extensible, so as to accommodate themselves to spaces of varying lengths. Preferably these parts are made 40 of metal and have interlocking teeth to prevent relative endwise movement. They are made to have uniform thickness from end to end, whether extended or not, thereby affording support for the type that may be set 45 against them on either side thereof; also, the adjustment is preferably by picas in length, and the different sizes vary by picas in width, although other sizes may be used, if desired as, for instance, for blocking out the blank 50 space of color-work.

The details of my invention will be understood from the following description and

claims, reference being had to the accompanying drawings illustrative of the preferred embodiment thereof.

In the drawings, Figure 1 is a top plan view of one form of my invention. Fig. 2 is a view thereof in perspective, showing the support afforded thereby to the adjacent type. Fig. 3 is a detail in front elevation, showing the 60 two members of the furniture taken apart. Fig. 4 is a similar detail of a larger size of furniture, indicating by way of illustration an adjustability between and including thirty-

nine and fifty-seven picas.

In the embodiment of my invention herein shown the furniture is composed of two similar parts A and A', made of metal or other suitable material. Each part is recessed at B B' and provided with an extension-tongue 70 C C', adapted to fit snugly within the recess of the opposite part, as indicated in Fig. 1. Means for locking the two parts A A' in their various extended positions are provided, interlocking teeth c being herein shown for that 75 purpose. As one part is moved along relatively to the other the teeth automatically interlock, being held rigidly together by the adjacent type in the chase. I prefer to extend these teeth along the entire length of the 80 tongues, the last tooth c' falling just within the recess B or B', as the case may be, the remaining bottom portion of the recess being smooth and uncorrugated, this construction insuring that the furniture shall be rigidly 85 locked when the parts are closed, and having also the advantage of being cheap and sufficiently strong.

The teeth c may be square, as in Fig. 1, rounded, as in Fig. 3, or of any other pre- 90 ferred shape or disposition. The two tongues when interlocked or overlapped, as shown in Fig. 1, always have a combined thickness precisely the same as that of the body or end portion whether extended or not, thereby prop- 95 erly sustaining adjacent type (see Fig. 2) in accurate alinement. The teeth are spaced one pica apart, so that at each extension of the furniture a move of one tooth makes it one pica longer than before. The upper edge of 100 the furniture is provided with a scale (shown at d) to indicate in picas the length to which it is extended; also, the furniture is made in thicknesses of one, two, three, &c., picas, as

well as of different lengths, thereby corresponding to the sizes of type now in use.

My invention is quick, simple, and effective in all display composition and where blank is 5 required, being especially valuable for colorwork, where there is a blank space to be accurately blocked, and also being of great value for blanking out type-lines, particular in title-

pages, bill-heads, cards, &c.

Supposing a letter-head were to be blanked out, the compositor would select the proper width of furniture and simply extend it to fit into the blank space to be filled. This might indicate eighteen picas. At once he would se-15 lect a similar furniture, extend it to eighteen picas, and fit it into the other side of the form, having thereby quickly and accurately cen-

tered the type in question of the letter-head at two operations, instead of being required 20 to pick up quad after quad, and fitting and wedging them in after the old fashion. Moreover, each size being complete in two pieces that is to say, having its several lengths all in one piece of furniture—there is less liabil-

25 ity of its working loose in the press. It occupies less room in the font and obviates the necessity of keeping the extensive and expensive variety of stock in the form of quads, quotations, &c., now usual.

Various changes in details of arrangement and combination may be resorted to without departing from the spirit and scope of my invention.

Having described my invention, what I 35 claim as new, and desire to secure by Letters Patent, is—

1. Extension furniture for printers, consisting of a body portion, a recess therein, a second body portion, a tongue thereon to oc-40 cupy said recess, and means to automatically lock said parts rigidly together, the thickness of said furniture remaining always the same in all the adjustments thereof to different lengths, substantially as described.

2. Extension furniture for printers, comprising two overlapping parallel parts, adapted to stand vertically facing each other in use,

the facing-surfaces thereof being formed to coöperate to rigidly lock said parts together against longitudinal movement, substantially 50 as described.

3. Extension furniture for printers, comprising two parts, each part consisting of a body portion and a tongue, said body portion being provided with a recess adapted to re- 55 ceive the tongue of the opposite part, and interlocking teeth on said tongues respectively to lock said two parts together in their adjustments, substantially as described.

4. Extension furniture for printers, com- 60 prising two parts, each part consisting of a body portion and a tongue, said body portion being provided with a recess adapted to receive the tongue of the opposite part, interlocking teeth on said tongues respectively to 65 lock said two parts together in their adjustments, and graduated scales on said body portions corresponding to said teeth, substantially as described.

5. Extension furniture for printers, com- 70 prising two overlapping parallel parts, means to automatically interlock the same at intervals varying by picas, and a scale graduated on one of them to indicate said picas, substan-

tially as described.

6. As an article of manufacture, a singlepiece part of extension furniture, said part comprising a body portion, having parallel sides, said body portion being centrally recessed at one side, a tongue extending from 80 said body portion in alinement with said recess, the back side of said tongue lying in the plane of the corresponding side of the body portion, and the front side of said tongue being provided with teeth, substantially as de- 85 scribed.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM E. ELA.

Witnesses: GEO. H. MAXWELL, JOHN C. EDWARDS.