

W. Donald.

Quadrat.

N<sup>o</sup> 110,752. Patented Jan. 3, 1871.

Fig: 1 old Form

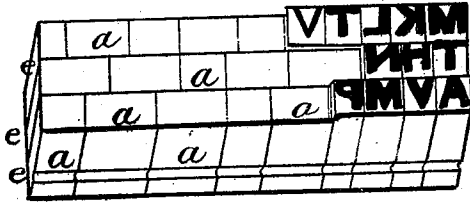


Fig: 2. New Form



Fig: 3 New

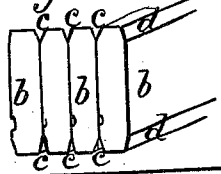
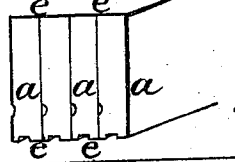


Fig: 4. Old.



Witnesses

Just B. Hallock  
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Inventor;

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# United States Patent Office.

WILLIAM DONALD, OF ERIE, PENNSYLVANIA.

Letters Patent No. 110,752, dated January 3, 1871.

## IMPROVEMENT IN QUADRATS.

The Schedule referred to in these Letters Patent and making part of the same.

### To all whom it may concern:

Be it known that I, WILLIAM DONALD, of Erie, in the county of Erie and State of Pennsylvania, have invented a new and improved Quadrat for use in printing; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and the letters of reference marked thereon.

The nature of my invention consists in so constructing a quadrat that, when types are set for printing, and it is desired to separate them for the purpose of "making up" matter, the same can be easily done without danger of "squabbling" or disarranging the matter, and also to prevent the types from adhering so closely to the table on which they rest when wet, as they are, to make them adhere together.

My invention consists in changing the form of the quadrat.

In order to illustrate my invention more perfectly I have, in the drawing, shown the present as well as my improved form of a quadrat.

The accompanying drawing exhibits my invention, as follows:

Figure 1 shows a section of types set up for printing, with the present form of quadrat used in the spaces.

Figure 2 shows a like section of "matter," with my improved form of quadrat used therein.

Figure 3 is an end view of the section shown in fig. 2.

Figure 4 is an end view of fig. 1.

In these figures of the drawing—

*a a v*, &c., are the present-formed quadrats, and

*b b b*, &c., are my improved form.

It will be seen, therefore, that my improved form of quadrats differ from the present form in that they are beveled on each side at each end, *d d* in fig. 3 representing the bevel.

Hence it will be seen that, when my form of quadrat

is introduced into matter, grooves *c c* will be formed (fig. 2) in the spaces, while, by the present form of quadrat, a plane surface is formed in the spaces.

After types are set up by the compositors they are placed on galleys, and from thence onto stone tables, where they are arranged in the forms, called the making-up process. When taken from the galleys, and before the types are wet so as to make them adhere closely to each other, and in making up they are separated by the operator by slipping a rule in between the lines.

With the present formed quadrat used in spacing, and the types closely adhering, it is hard to insert the rule, and the operator often squabbles the types. By using my form of quadrat, as before stated, grooves are formed, in which the rule can be placed and easily inserted between the lines of types, wholly preventing any danger of squabbling or deranging the types.

It will be observed, as before stated, that the quadrats are beveled at both ends.

This is done—

First, to make it of no matter which end of the quadrat is placed up.

Second, to form grooves on the under side of the types also.

The object of the grooves on the under side of the types is to create air-spaces and prevent the types from adhering so closely to the stone or table on which they are sitting when wet, allowing them to be more easily lifted, and thus again lessening the danger of squabbling.

What I claim as my invention is as follows:

The improved quadrat, beveled substantially as shown, for the purpose set forth.

WM. DONALD.

Witnesses:

BENN B. EVANS,  
JNO. K. HALLOCK.