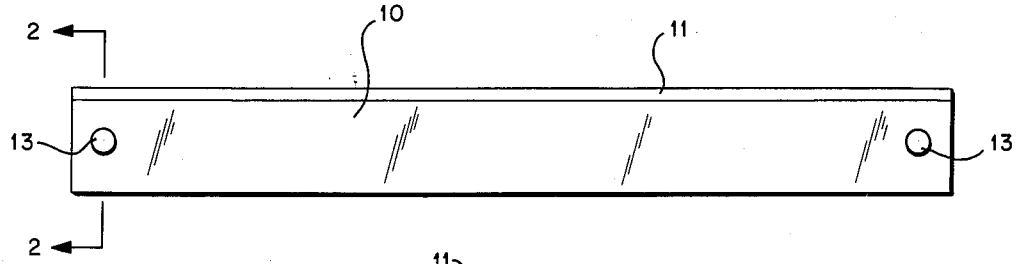
Nov. 29, 1955 C. M. HUGHES 2,725,030

ALIGNER AND HEADING INDICATOR

Filed March 25, 1954

Fig. 1



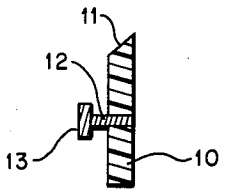


Fig. 2

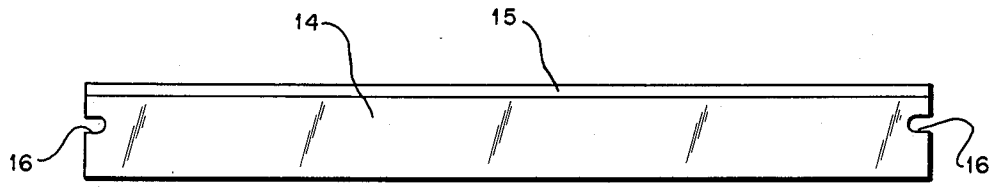


Fig. 3

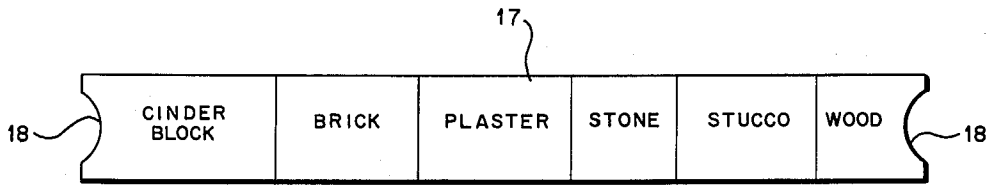


Fig. 4

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ALIGNER AND HEADING INDICATOR

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4 Claims. (Cl. 116—135)

(Granted under Title 35, U. S. Code (1952), sec. 266)

The invention described herein may be manufactured and used by or for the Government of the United States of America for governmental purposes without the payment of any royalties thereon or therefor.

This invention relates to an indicating device, more particularly, it relates to a device for determining the horizontal alignment of data in vertical columns on a printed page and at the same time indicating the column headings at various distances from the top of the page.

In referring to multiple columns of data listed on long sheets of paper for posting, typing or other purposes, a frequent source of error results from the difficulty of identifying the columns by headings at appreciable distances from the top of the page and in determining the correct horizontal alignment of the data. An example of the type data referred to is IBM tabulation which is ordinarily recorded in a large number of columns on long sheets. In referring to IBM data somewhat removed from the top of the page, the continuous checking of column headings which is required is time consuming and is a frequent source of error. The companion problem of determining the horizontal alignment of the data applies to all of the data listed on the page.

It is an object of this invention to provide apparatus making possible the simultaneous identification of column headings of data and horizontal alignment of the data when it is recorded in a large number of long columns.

It is another object of this invention to provide apparatus of the type referred to which is of simple construction and operation, and economical to manufacture.

Other objects and many of the attendant advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

Fig. 1 is a plan view of the base plate of the device of the invention;

Fig. 2 is a vertical cross-section of the base plate taken on the line 2—2 of Fig. 1;

Fig. 3 is a plan view of the face plate of the aligning and heading indicating device, and

Fig. 4 is a plan view of a type of insert bearing representative type information, which is adapted to be placed between face plate and base plate.

Referring to Fig. 1 the base plate **10** is of rectangular configuration with the long dimension greatly exceeding the short dimension. It is preferably constructed of plastic but may be made of other material and may be transparent. It should be capable of retaining crayon markings without smearing. To aid in positioning the base plate over the data it is preferably beveled at its front edge as shown at **11**. The bottom of the base plate is flat to facilitate its movement across the paper and its top is preferably of flat construction to receive the flat face plate **14**. To provide for locking the face plate on top of the base plate **14** in position, cylindrical studs **12** are mounted centrally in the base plate a short distance from its ends. The studs **12** are provided with caps **13** which

may be made integral with the studs. The studs may be attached by means of threads, made integrally with the base plate or heat sealed in place if made of plastic.

Referring to Fig. 3, face plate **14** which is adapted to nest on base plate **10**, serves to secure reference data, such as column headings, between it and the base plate. It is flexible and made of transparent material, such as plastic, and is approximately of the same length as the base plate but somewhat narrower. It may be provided with a beveled edge as shown at **15** so that when it is placed on top of the base plate the beveled edges of the two will mate. The face plate is provided with channels **16** at either end for receiving the studs **12** of the base plate **10** when the face plate is in position.

These channels are of a width substantially corresponding to that of the studs **12**. The distance between the ends of the channels corresponds to that between the studs **12**, and the thickness of the face plate corresponds to the distance between caps **13** and the upper surface of base plate **10**, thus ensuring a snug fit when the flexible face plate is in position.

Referring to Fig. 4, the insert **17** provides the identification data, such as column headings, which is used to identify data on the page. It is preferably flexible and may be made of plastic or other suitable material. The identification data may be written on the insert or typed on a strip of paper and the strip pasted on the insert. It is feasible to support a paper strip bearing identification data between the base plate and the face plate without the aid of the insert, however, if this is done, difficulty is experienced in preventing the strip from moving. In the preferred modification the insert **17** is provided with indentations **18** at either of its ends for receiving studs **12** when the device is assembled. The distance between the limits of the indentations corresponds to the distance between studs **12** so that the flexible insert will be held securely in place after insertion.

The device is assembled by flexing the insert **17** and face plate **14** and placing them between the studs **12**. This results in an arrangement in which the face plate is held securely between the studs with the insert **17** locked between the face plate and base plate by means of the caps **13**. In use, the headings of data columns are transposed to the insert or typed headings inserted in place of the insert, and the device is moved progressively down the page. The straight edge serves to align the horizontal rows of data and the column headings on the insert indicate the proper headings for the data columns.

The invention has utility as a labor saving device. It is readily adaptable to all types of data and its operation is quite simple. It is of highly simplified construction and is adaptable to inexpensive manufacturing techniques.

Obviously many modifications and variations of the present invention are possible in the light of the above teachings. It is therefore to be understood that within the scope of the appended claims the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. An aligner and heading indicator for use in referring to multiple columns of data, comprising, a base plate having a substantially flat bottom surface, a transparent face plate adapted to fit on the top of said base plate, means for removably securing said face plate to the top of said base plate, and an insert bearing identification data and adapted to be supported between said base plate and said face plate.

2. An aligner and heading indicator for use in referring to multiple columns of data, comprising, a rectangular base plate of greater length than width and having a substantially flat bottom surface, a face plate of substantially the same dimensions as said base plate adapted to fit on the top of said base plate, means for removably

securing said face plate to the top of said base plate, and an insert of substantially the same dimensions as said base plate bearing identification data and adapted to be supported between said base plate and said face plate.

3. An aligner and heading indicator for use in referring to multiple columns of data, comprising, a rectangular base plate of greater length than width having a substantially flat bottom surface; at least one stud at either end of said base plate extending from its top surface, said stud having a cap thereon of larger diameter than the stud; a flexible transparent face plate of substantially the same dimensions as said base plate having at each of its ends at least one channel extending inwardly therefrom, the distance between the ends of said channels conforming to the distance between said studs, and an insert bearing identification data and adapted to be supported between said base plate and said face plate.

4. An aligner and heading indicator for use in referring to multiple columns of data, comprising, a rectangular transparent base plate of greater length than width having a substantially flat bottom surface, said base plate having at least one straight edge which is beveled; at least one stud at either end of said base plate extending from its top surface, said stud having a cap thereon of larger

diameter than the stud; a substantialy flat, flexible, transparent face plate of about the same length but of slightly less width than said base plate and having a beveled edge adapted to mate with the beveled edge of said base plate when the device is assembled, said face plate being of a thickness corresponding to the distance between said stud and said cap and having at each of its ends at least one channel extending inwardly therefrom, the distance between the ends of said channels conforming to the distance between said studs; and a flexible insert bearing identification data, said insert having at least one indentation at each of its ends, the distance between the limits of said indentations corresponding to the distance between said studs; whereby base plate, insert and face plate may be assembled into a readily demountable assembly which can be used for alignment of rows of data in columns and for identification of the column headings.

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