Nov. 3, 1970 B. J. CONNITO 3,537,776

MEANS FOR ATTACHMENT OF MAGNIFYING DEVICE TO PRINTING CALCULATORS, ADDING MACHINES, AND THE LIKE

Filed April 11, 1969

FIG. 1

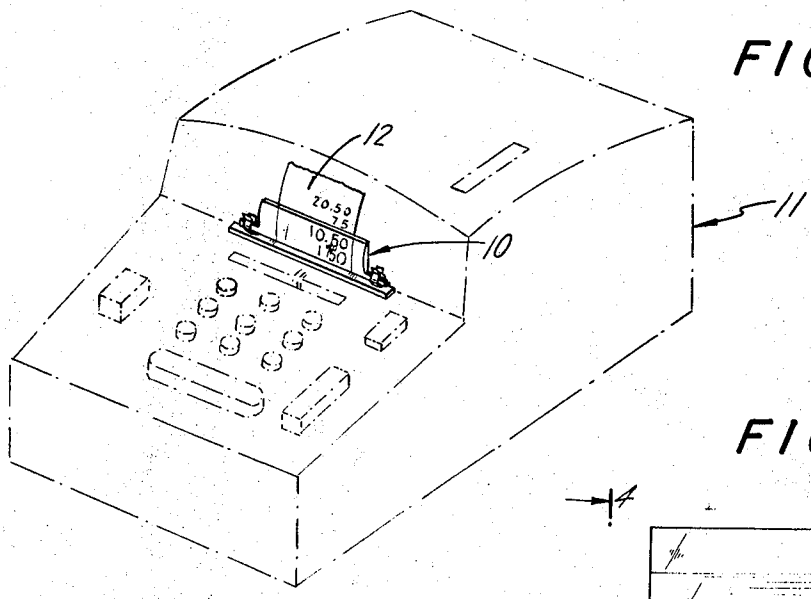
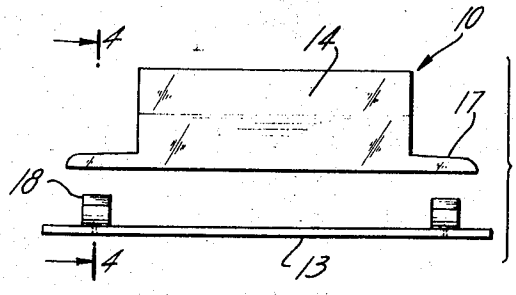


FIG. 2



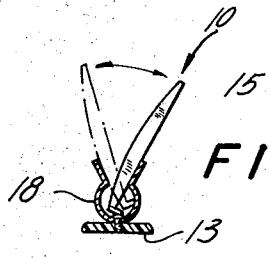


FIG. 4

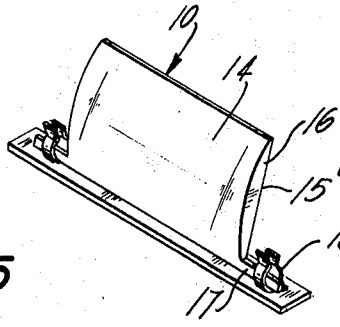


FIG. 3

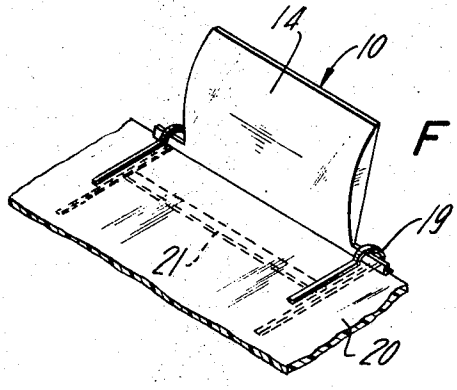


FIG. 5

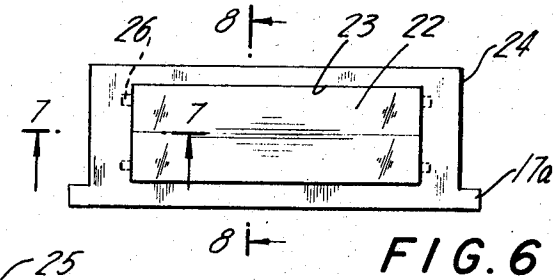
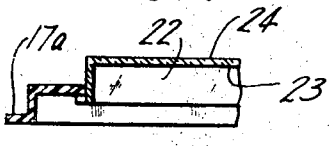


FIG. 6

FIG. 7



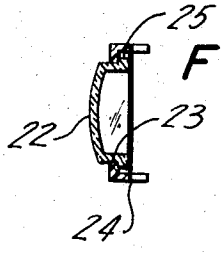


FIG. 8

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MEANS FOR ATTACHMENT OF MAGNIFYING DEVICE TO PRINTING CALCULATORS, ADDING MACHINES, AND THE LIKE

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U.S. Cl. 350—243 1 Claim

ABSTRACT OF THE DISCLOSURE

A magnifying lens with integral ear elements secured to a standard having an adhesive backing to permit attachment of the standard to calculators, adding machines and the like.

My present invention relates generally to a magnifying device and more particularly to a magnifying device for attachment to adding machines and printing calculators and the like, of the type wherein the arithmetical data which has been fed into the machine is imprinted on a paper tape.

In every day business operations there is a constant and increasing utilization of adding machines and printing calculators, and after many hours of continuous use the eyes become strained and tired, and frequently it becomes very desirable to have a magnified view of the final or key figures of a list of numbers which have been imprinted on the paper tape. Even a person with normal vision would appreciate having these figures occasionally magnified, particularly when the inked ribbon becomes worn and needs replacing and until said ribbon is replaced the printed numerals on the tape may not be too sharp or discernible and would therefore warrant magnification. Also after many hours of operating an adding machine or printing calculator a person will become fatigued due to a poor lighting arrangement and might feel the need for a magnified view of the final figures on the tape.

The principal object of my invention is to provide a means for attaching a magnifying device to printing calculators and adding machines which will magnify the imprinted data on the final inches of paper tape wherein the totals or other essential figures would appear.

It is an object of the present invention to provide a magnifying attachment having a convex upper face and plane lower face which will enable the operator of the calculator or adding machine to quickly and accurately determine the total of the imprinted results of any figures that have been fed into the machine.

It is a further object of the present invention to provide a means for attachment of a magnifying device to printing calculators, adding machines, and the like which will permit the user of the magnifying attachment to adjust same to proper magnification to the eye of the user by setting in the desired position, and allows the ready use thereof without eyestrain.

A still further object of the invention is the provision of a magnifying device with attaching means which will permit the use or non-use in that the lens can be either removed entirely from the mounting bracket and stored, or flipped downwardly toward the user so as to be in a non-viewing position.

Still another object of the present invention is the provision of a suitable magnifying attachment which enables the user to read the numerals on the imprinted tape in the area of said magnifying attachment from a distance greater than is possible when such device is not used, and permits more desk working area in that the user need not have the adding machine or printing calculator as close to the operator as would normally be required without the use of the magnifying device.

This magnifying device attachment and means for attaching same possesses the combination of novel features outlined above and which is of simple and practical design, can be manufactured at a low cost and sold at a low price, and is exceedingly effective for the purposes for which it is designed.

While only the preferred forms of attaching means and construction of same are described and illustrated, it is to be understood that the invention is not limited to such preferred forms but that other attaching means may be made therein without departing from the spirit of the invention as hereinafter claimed.

In the accompanying drawings I have illustrated a complete example of the physical embodiment of my invention according to the best mode I have thus far devised.

Referring to the drawings:

FIG. 1 is a front elevation of the magnifying device shown in combination with an adding machine in an upright and viewing position.

FIG. 2 is a front elevation of the magnifying device and the mounting means by use of spring clips.

FIG. 3 is a prespective view showing the right and left arm of the magnifying device engaged in the spring clips of the mounting bracket.

FIG. 4 is a side elevational view and indicates the varying angles at which the device can be positioned.

FIG. 5 is a perspective view showing a modified means for attachment of the magnifying device to the hood cover of the adding machine or printing calculator by the use of metal clips held together with a crossbar.

FIG. 6 is a frontal view of the magnifying device embodied in a frame.

FIG. 7 is a sectional view at line 7—7 of FIG. 6.

FIG. 8 is a sectional view at line 8—8 of FIG. 6.

In the embodiment of the present invention, as illustrated in FIG. 1 of the drawing, there is shown a magnifying device **10** mounted upon an adding machine **11**, in front of and in close proximity to the paper tape **12**.

The magnifying device **10** in FIG. 2 is composed of a rigid, transparent and non-breakable material, and for this purpose a synthetic plastic resin is used for forming the device. For example, methyl-methacrylate resins, such as those sold under the trade name "Lucite," or polystyrene resins, are suitable for this purpose and, having the desired optical properties, may be readily molded to form the magnifying device shown in FIG. 2 of the drawing together with its accompanying mounting bracket **13**.

The magnifying device **10** is formed to provide a convex front wall **14**, and a flat rear wall **15** opposite to the convex wall, two flat side walls **16**, and two short arms **17**, one on both the left and one on the right situated at the bottom of the magnifying device, said arms being for the purpose of engaging said magnifying device to the mounting bracket.

The mounting bracket **13**, for the magnifying device is constructed of a thin plastic strip approximating the same length as the device with its arms as shown in FIG. 2, and to which is attached by means of rivets, spring clips **18**, of the type which are similar to those used as fuse holders. The underside of the mounting bracket utilizes a self adhesive which merely requires spotting the mounting bracket in the desired location on the hood cover of the adding machine or printing calculator, and which will then become fully secured. The fuse holder type spring clips **18**, will have an aperture sufficient in diameter, so that the arms of the magnifying device **17**, would fit snugly and securely and would remain in a predetermined position until moved manually.

In the modification shown in FIG. 6 the magnifying device comprises a plano-convex lens **22**, formed of plastic material or glass held within an opening **23**, in a frame of

resilient material **24**. To secure the lens in the frame a small groove, **25** (FIG. 8) in the outer peripheral edge of the lens is provided, the frame having an opening of sufficient size, and the lens also having stops **26**, permitting the lens to be snapped into the opening of the frame to a point and held fast. The arms **17***a* are a molded part of the frame and are used to secure the magnifying device to the mounting bracket as in FIG. 2. The frame would allow the user of the magnifying device to focus the eyes directly in the area within the frame where the total or final figures on the imprinted tape would be shown.

While the magnifying device, together with its modification of the mounting bracket has been described and illustrated with reference to its particular adaptation when attached to adding machines or printing calculators, it will be readily apparent that the device will permit the numerals on the imprinted tape to be seen from a greater distance than is possible when the device is not atttached, and will also help to reduce fatigue.

Having thus fully described my invention, what I claim as new and useful and desire to secure by Letters Patent is:

1. A detachable magnifying device for printing calculators, adding machines, and the like comprising an elongated one piece magnifying lens of rectangular plan view outline having two integral ear pivot members extending on opposite sides from the lower corners of the lens to provide an axis and holding means for securement within an elongated standard, said lens having a solid cross sectional form comprising a front and back surface, wherein said front surface defines a plane of convex cross sectional

outline and said rear surface characterizes a plane of flat form, said planes intersecting at upper and lower margins of the solid lens body to enclose and define an elongate plano-convex form of the lens element,

said device having a standard comprising a thin elongated plastic strip of rectangular outline having a top and bottom surface, said bottom surface having a self adhesive backing for securement to the calculator or adding machine, said top surface having a pair of spring clips secured at opposite ends of the rectangular strip, said clips acting independently to engage the ear elements of said lens, said clips being biased to provide relatively tight frictional engagement with the integral ear shaft axis of said lens, said clips having flared end portions to facilitate insertion of the lens ears within the clip array.

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