Dec. 13, 1938. J. MACALUSO 2,139,761

AIR AGITATOR FOR BENCH MACHINE OPERATORS

Filed Oct. 2, 1937

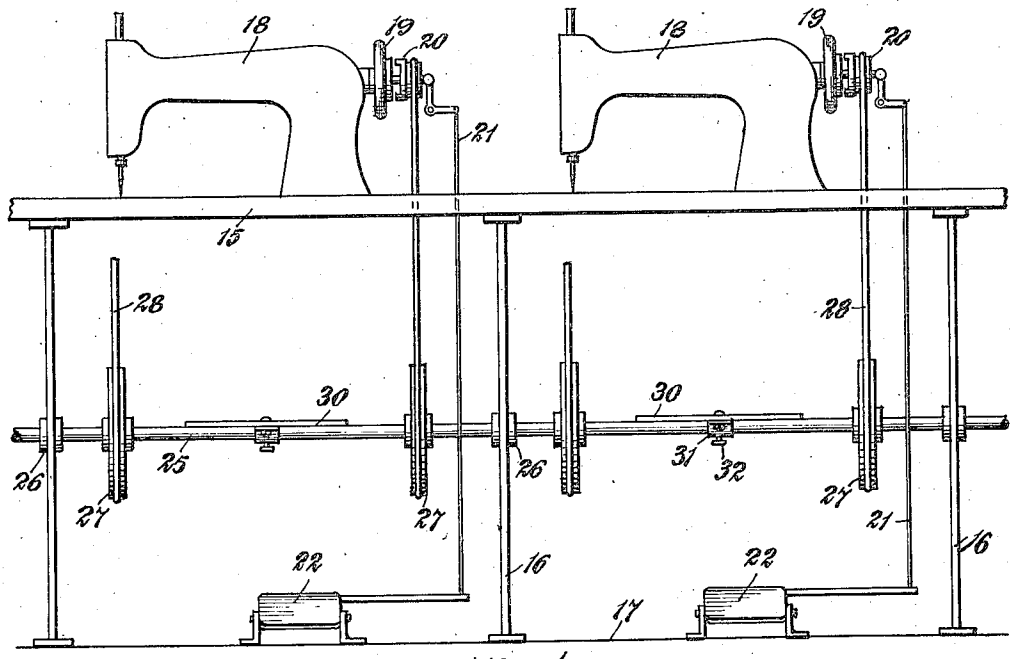

Fig. 1

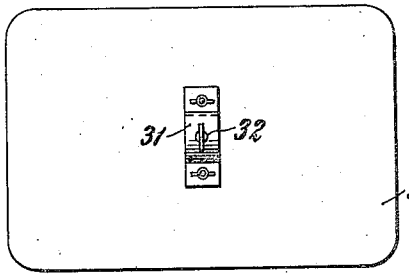

Fig. 2

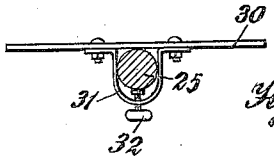

Fig. 3

INVENTOR
JOE MACALUSO
BY Marvin Green
ATTORNEY

Patented Dec. 13, 1938

2,139,761

UNITED STATES PATENT OFFICE

2,139,761

AIR AGITATOR FOR BENCH MACHINE OPERATORS

Joe Macaluso, New York, N. Y.

Application October 2, 1937, Serial No. 167,046

1 Claim. (Cl. 230—248)

This invention relates to devices for the agitation of air in work rooms where there are low level, rapidly rotating shafts, for the comfort of machine operatives who, by reason of the nature of their work, are compelled to remain sitting for long periods of time.

In large factories, where the manufacture of garments or other articles requiring extensive machine stitching, is carried on, it is usual to provide long benches on which are mounted sewing machines in closely spaced relation, belt driven from a shaft below the bench, and provided with individual clutches, foot controlled by operators seated in close proximity in front of the machines.

Under such condition the operatives soon become fatigued because of breathing vitiated air, the exertion of mental effort, physical force and other disadvantages inherent in factories, particularly where it is not feasible to open windows.

It is therefore an object of this invention to provide an exceedingly simple, but highly efficient device whereby the air is maintained in motion, particularly the lower lying stratum below the bench, producing a beneficial effect.

A further feature is in the provision of air agitating means, which cannot create a draft above the bench surface, or interfere in any way with either the work or well being of the operatives.

Another purpose is to produce devices for attaining the foregoing objects, which are inexpensive in themselves and negligible in cost of operation.

These several objects are accomplished by the novel construction and arrangement of simple parts hereinafter described and illustrated in the accompanying drawing, constituting a material component of this disclosure, and in which:—

Figure 1 is a front elevational view of a portion of a conventional factory sewing bench showing an application of the invention.

Figure 2 is a bottom plan view of an embodiment of the device in detail.

Figure 3 is a transverse sectional view of the drive shaft and wing thereon.

In Figure 1, which is largely diagrammatic, the numeral 15 designates a sewing bench, mounted on supports 16 resting on the floor 17.

Fixed on the bench are sewing machines 18 having hand wheels 19, outwardly beyond which are drive clutch pulleys 20 actuated by rods 21 connected to control pedals 22 on the floor 17.

A drive shaft 25 extends longitudinally of the bench, substantially central thereof, to operate two rows of machines, one on each side of the bench, the shaft being mounted in bearings 26 formed on the supports 16.

Drive pulleys 27, fixed at predetermined intervals on the shaft, drive belts 28, passing through the bench 15 and trained around the clutch pulley 20.

The foregoing is merely descriptive of the usual arrangement of a stitch room and forms no part of the present disclosure, being given in order to convey a clear idea of the invention.

It will be noted that the drive pulleys 27 are spaced at a considerable distance apart, the shaft 25 being clear therebetween.

Fixed to the shaft in these spaces are single blades 30, consisting of flat plates of any suitable material, elongated rectangles in plan with rounded corners, these blades acting in the manner of a single bladed fan.

U-shaped loops 31 having opposed end flanges are rigidly bolted to the blades with the shaft 25 enclosed therein, the loops being provided with set screws 32 by which the blades may be firmly clamped in adjustment.

It will be apparent that when the drive shaft revolves, the blades will cause the air to move, increasing its circulation, giving comfort to the operators in front of the adjacent machine, but, due to their location, do not tend to create an air blast on the top of the bench.

Having thus described the invention and set forth the manner of its construction, installation and use, what is claimed as new and sought to secure by Letters Patent, is:

In a factory stitch room having a bench provided with a plurality of machines and a drive shaft below the bench common to all said machines, a plurality of thin flat fan blades composed of elongated rectangular plates disposed lengthwise of their centers on the shaft, in the vicinity of the operators of the machines, U-shaped loops having flat end flanges rigidly bolted on one side of each of said plates and through which said shaft freely passes, and clamp screws carried by said loops to impinge on said shaft whereby said plates may be adjusted along said shaft.

JOE MACALUSO.