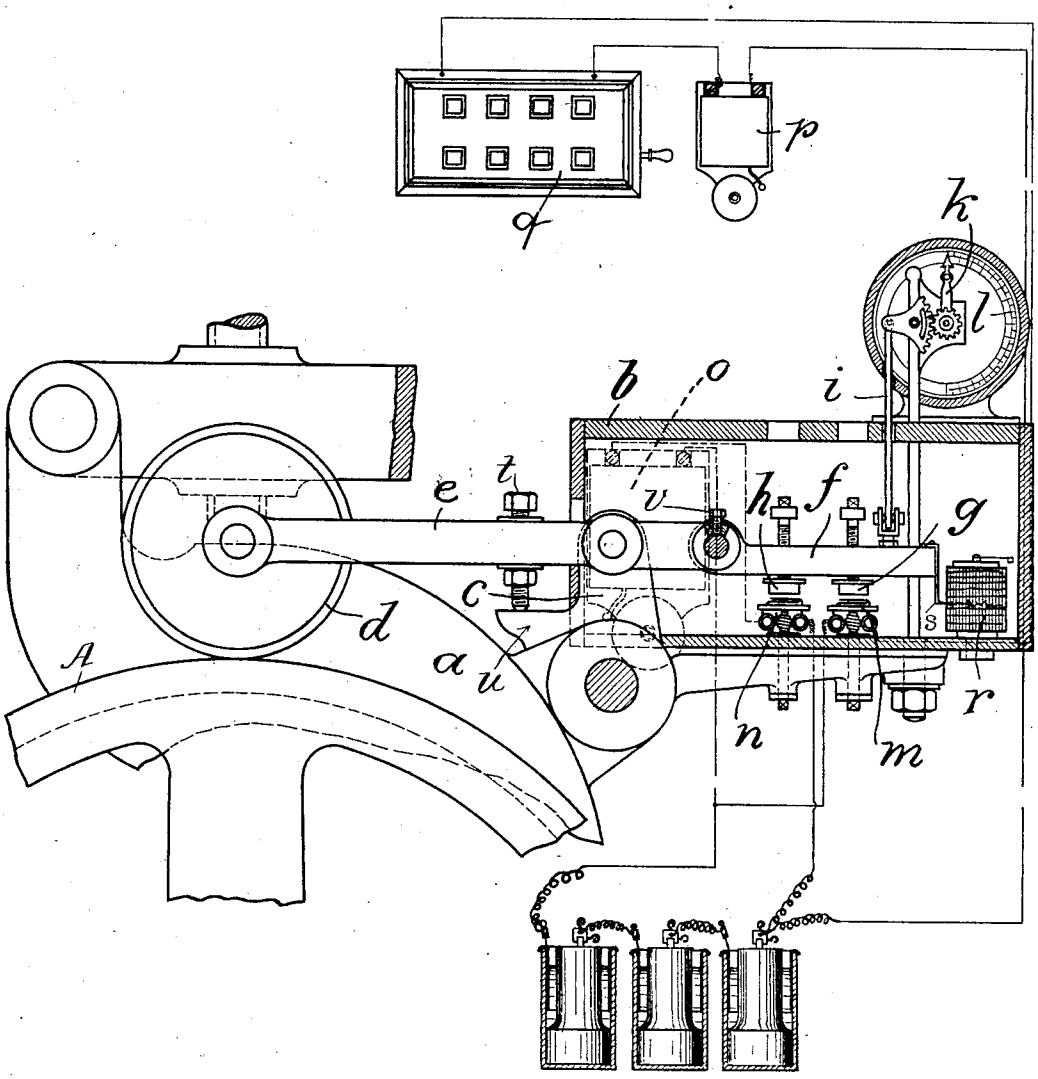
No. 763,011. PATENTED JUNE 21, 1904.

O. MIETASCHK.

SIGNALING DEVICE FOR PASTEBOARD MAKING MACHINES.

APPLICATION FILED DEC. 28, 1903.

NO MODEL.



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UNITED STATES PATENT OFFICE.

OTTO MIETASCHK, OF GÖRLITZ, GERMANY.

SIGNALING DEVICE FOR PASTEBOARD-MAKING MACHINES.

SPECIFICATION forming part of Letters Patent No. 763,011, dated June 21, 1904.

Application filed December 28, 1903. Serial No. 186,824. (No model.)

To all whom it may concern:

Be it known that I, OTTO MIETASCHK, a subject of the Emperor of Germany, and a resident of Görlitz, Germany, have invented certain new and useful Improvements in Signaling Devices for Pasteboard-Making Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The signaling devices at present in use on pasteboard-making machines are of extremely primitive construction. They are usually so arranged that as soon as the layers of paper winding onto the cylinder of the machine present the desired thickness of pasteboard the wheel running on the cylinder strikes the lever of a mechanical bell. If the workman does not want to cut off the pasteboard at the right time—that is to say, wants leisure—and at the same time desires to prevent his delinquency being betrayed by the bell, he has only to turn the adjustment-screw a number higher or to temporarily throw the signal-lever (which is always accessible to him) out of action. Pasteboard-making machines have also been fitted with electric-bell signals working in connection with an indicating mechanism. These devices likewise possess many defects, such as difficulty of adjustment, irregular working, owing to the use of draw-springs, the fact of the workman being able on his own account to throw out the gear, &c. Furthermore, they have no device for checking whether the signal is attended to by the operator. All these drawbacks are overcome according to the present invention, as, first, the workman cannot get access to the signaling device; secondly, as a check apparatus is fitted up in the manager's office or other suitable place, and, thirdly, as a special check device for the output of the machine can be employed in connection with the apparatus.

My invention is illustrated by the accompanying drawing, in which the figure shows a vertical section of the apparatus, together with coöperating parts.

On the standard *a* for the cylinder A, onto which the pasteboard winds, a casing *b* is secured. In this casing is located the bearing *c*, to which is pivoted a double-armed lever *e*. The outer end of this lever *e* is provided with a roller *d*, running on the machine-cylinder A. This arm of the lever *e* is also provided with a set-screw *t*, resting on a stationary bracket *u*, projecting from the machine-framing *a*. By turning the screw *t* the lever *e* may thus be adjusted for any required thickness of pasteboard. The inner end of the lever *e* is adjustably secured, by means of a set-screw *v*, to an arm *f*, which carries the two contact-makers *g h*, capable of adjustment through holes in the cover of the casing *b*. The arm *f* also carries the bearing for the draw-rod *i*, which actuates the pointer *k*, moving over the dial *l*. The contacts *m n* are secured to base of the casing. The contacts can be of any description. Liquid contacts may be employed, if desired. The contact *h n* serves on the circuit being made by the motion of the arm *f* and lever *e* to set the signal-bell *o* in operation on the thickness of pasteboard for which the apparatus has previously been set by the manager being attained. At the same time the pointer *k* will indicate the thickness on the scale *l*. If the workman fails to obey the signal, the end of the arm *f*, which carries the rod *i*, descends still further and makes contact at *g m*, the consequence being that the signal *p* in the manager's office rings and the annunciator *q* shows immediately that machine 1, 2, or 3, &c., is being improperly attended to.

For the purpose of enabling control of the working of every machine and of obtaining, as it were, a diagram of the day's output of the same a drum *r* is mounted at the rear of the casing *b*. This drum is wound with a paper band divided into time-squares and thickness-lines and is driven by clockwork, so as to make one or more rotations every twenty-four hours. The contact-making arm *f* carries a pencil *s*, the point of which rests on the zero-line as long as the runner *d* rests on the machine-cylinder or its shaft. Immediately the runner is lifted by the paper winding onto the cylinder the pencil *s* will descend be-

low the zero-line in the same proportion and returns on a layer of pasteboard being removed. As the drum *r* also turns, a small diagram is made for each sheet of pasteboard. From this diagram can be seen at once how many sheets and of what thickness have been turned out during each twenty-four hours. It also shows how long the machine has been running without load and at what hour and to what extent irregularity has occurred in the working. If desired, the wages of the workman might be paid on the basis of the diagram.

Having thus described my invention, what I claim as new is—

1. An electric signaling and checking device for pasteboard-making machines, comprising a machine-cylinder, a closable casing, a double-armed lever having its fulcrum therein, one end of which lever is located in the casing and the other end actuated by the machine-cylinder onto which the pasteboard winds, an arm adjustably secured to the inner end of the lever within the casing, electric signaling devices, contact-makers carried by the said arm each in succession closing the circuit of one of the signaling devices on descent of the said arm, a dial-indicator located without the casing, and a rod connecting the said arm with the pointer of said indicator, substantially as described.

2. An electric signaling and checking device for pasteboard-making machines, comprising a machine-cylinder, a closable casing, a double-armed lever having its fulcrum therein, one end of which lever is located in the casing and the other end actuated by the machine-cylinder onto which the pasteboard winds, an arm adjustably secured to the inner end of the lever within the casing, electric signaling devices, contact-makers carried by the said arm each in succession closing the circuit of one of the signaling devices on descent of the said arm, a dial-indicator located without the casing, a rod, connecting said arm with the pointer of said indicator, a paper-carrying drum rotating within the casing, and a pencil carried by the said contact-making arm recording the motions of the latter on the said drum, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

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Witnesses:
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