(No Model.) 2 Sheets—Sheet 1.

G. W. GLAZIER.

GLUING MACHINE.

No. 346,992. Patented Aug. 10, 1886.

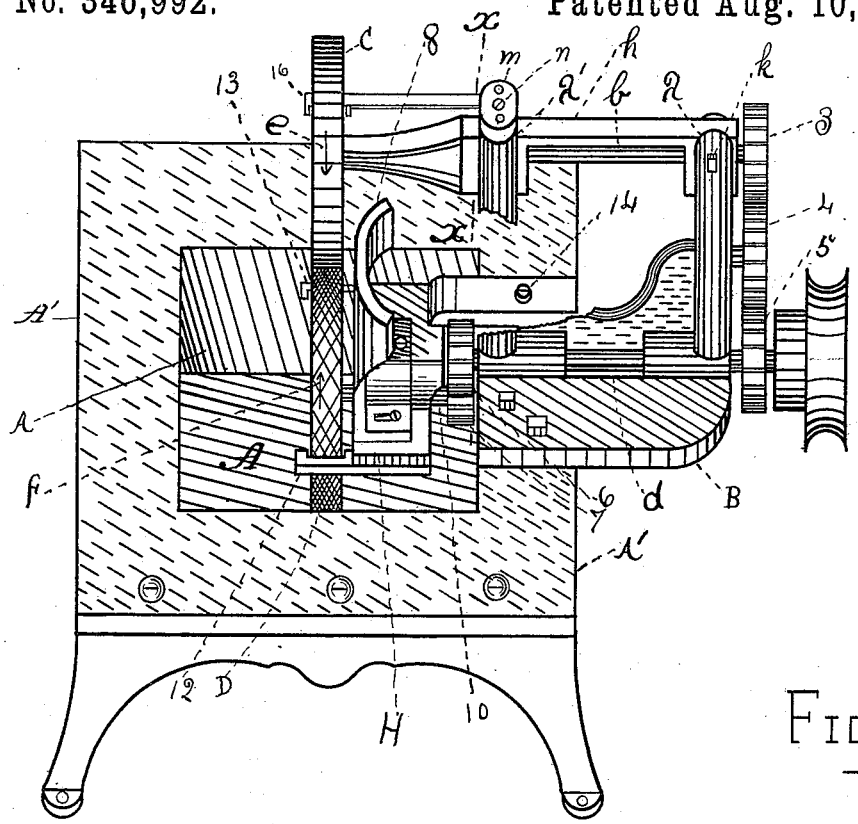


Fig: 1.

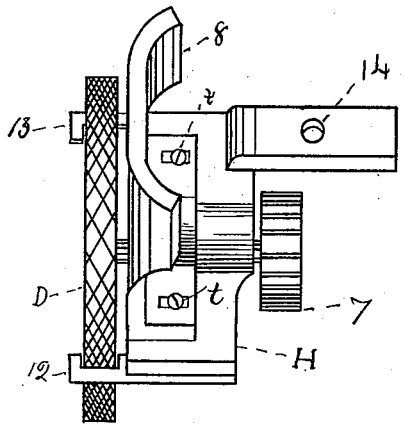
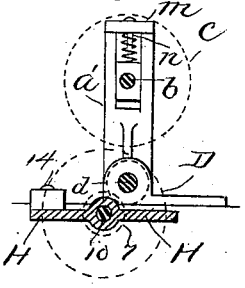


Fig: 2.

Fig. 3.



Witnesses.
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(No Model.) 2 Sheets—Sheet 2.

G. W. GLAZIER.

GLUING MACHINE.

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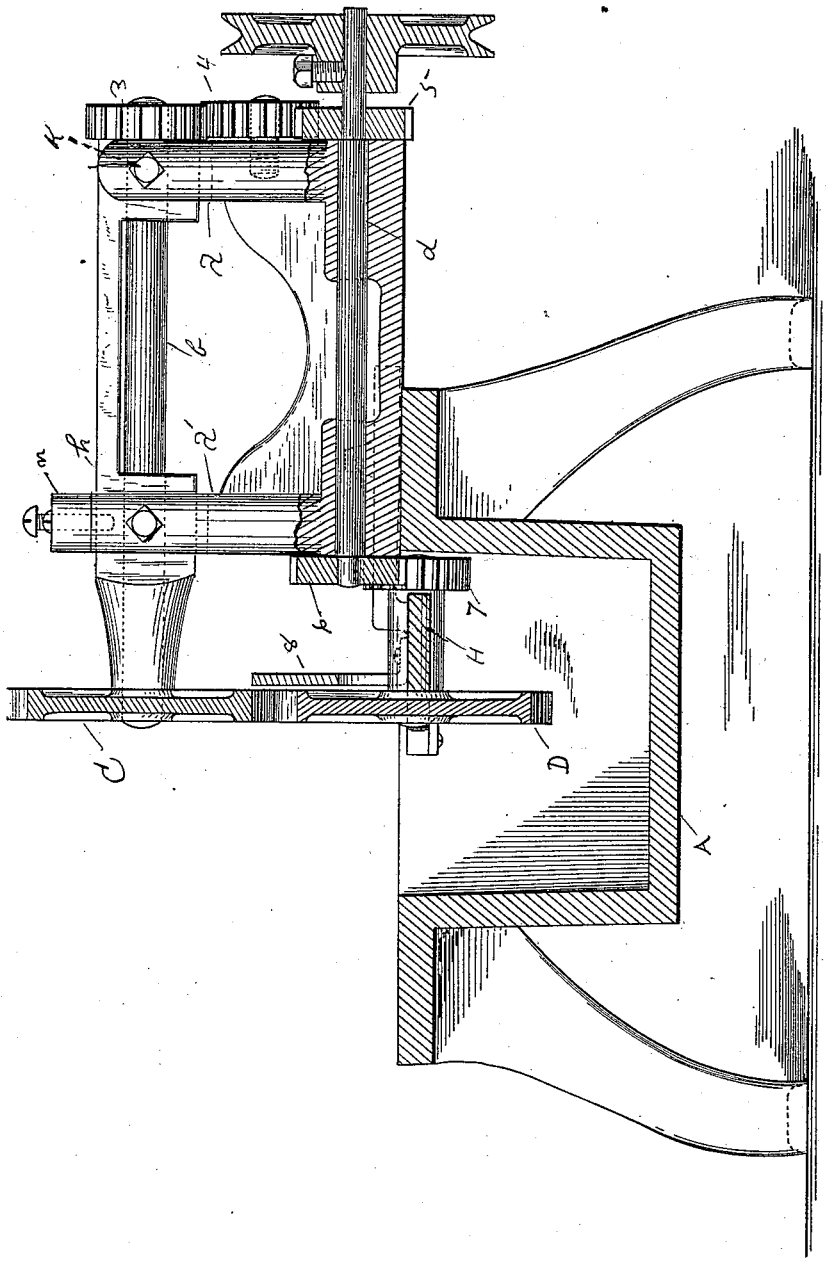

Fig. 4.

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UNITED STATES PATENT OFFICE.

GEORGE W. GLAZIER, OF SALEM, MASSACHUSETTS.

GLUING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 346,992, dated August 10, 1886.

Application filed February 20, 1885. Serial No. 156,530. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. GLAZIER, of Salem, in the county of Essex and Commonwealth of Massachusetts, have invented certain Improvements in Gluing-Machines, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to mechanism for gluing pasteboard and other articles, of which boxes and similar articles are made; and the nature of this invention is fully described hereinafter, and fully pointed out in the claims.

Referring to the drawings, Figure 1 is a view looking down upon the machine from one side at an angle of about forty-five degrees, and illustrates the top and side of the machine. Fig. 2 is a similar view of the glue-distributing mechanism detached from the machine. Fig. 3 is a detail view, on line *x x* of Fig. 1, showing the bearing for the feed-roll, the said feed-roll, together with the glue-distributing roll being shown in dotted lines. Fig. 4 represents a vertical section in front of the main driving-shaft, some of the parts being in side elevation.

The glue pan or basin is made in the usual and customary way of constructing glue-pans, and is designated in the drawings by the letter A. It is to be provided with legs, if desired, and has an outwardly-extended brim, A′, as shown, thus adapting it for use on its legs; or, if desired, it may be depressed into a suitable opening in the top of a table or bench in the usual way. It is to be heated by hot water brought into contact therewith in any obvious manner, as heretofore practiced. Connected to the said glue-pan A is a plate, B, which may be fixed to the pan or temporarily attached thereto by bolts, as shown. Said plate B has two vertical posts, *a a′*, in the upper of which is mounted the shaft *b*. The lower portions of the parts are extended horizontally to form bearings for a shaft, *d*, as shown. Shaft *b* carries on one end the wheel C, and receives motion from the shaft *d* through intermediate gears, 3 4 5, the wheel being thus revolved in the direction indicated by arrow *e*. The corrugated wheel D, that takes up the glue and co-operates with wheel C to feed forward blanks, is fixed upon the short stud-shaft 10, on the opposite end of which stud is fixed the small pinion 7, the stud being journaled in the frame or plate H, to bring the gear into engagement with the gear on pinion 6 on the end of shaft *d*. By this arrangement the motion of shaft *d* is transmitted to wheel D to revolve it, as indicated by arrow *f*.

It will be obvious that the wheels D C are caused to revolve in opposite directions relatively to each other, as indicated by the arrows *e f*, or reversely, according to the motion of shaft *d*. Said wheel D takes up and distributes the glue, while the wheel C, being in close proximity thereto, bears upon the top side of the blank and helps to move the same along.

It is of course desirable to feed through the wheels many different thicknesses of material, and to this end I mount the shaft *b* in a box or block, *h*, one end of which is connected to post *a* by a swivel-pin, *k*, while the opposite end is fitted to slide vertically up and down in the post *a′*, as shown, thus allowing the wheel C to lift and accommodate the blanks without regard to thickness thereof. On the top of post *a′* is a cap, *m*, and under the cap is a spiral spring that surrounds the screw *n*, and bears upward against the cap and downward against the block *h*, thus keeping the wheel pressed downward upon the top of the material, to help move the same forward.

In rear of wheels C D is the guide-plate 8, that is shown in the drawings as clamped to the block or plate by means of screws *t t*, and is thus rendered not only detachable from the block, but adjustable toward and from the wheels C D. It operates as a guide to the edge of the blank while it passes through the wheels, and may be secured directly to or formed integral with the block, though I prefer to make it adjustable, as stated and as shown. Said plate or block H is further provided with arms or wipers 12 and 13, that reach forward to the wheel D, as shown, though not being allowed to quite touch the same. They operate to prevent the glue from rising too thickly or in lumps on the wheel D, and thus distributing the glue evenly.

In operating the machine, the wheel D is depressed into the glue held by basin A, and is allowed to run with more or less of its lower edge in the glue. Said wheel takes up the glue by contact therewith, and the same is first distributed evenly by wipers 12 13, as described,

and the top of the wheel, bearing upward against the blank being fed along, deposits the glue along the edge of the blank, and also co-operates with the wheel C to move forward the blank, as before stated.

To insure a sufficient deposit of glue, I prefer to groove or cut the periphery of the wheel D, as shown, as a larger deposit of glue is thereby secured, allowing the machine to be run at greater speed.

It is not intended that wheel C should at any time come into contact with wheel D, as it would thereby get covered with glue, and thus damage the top edge of the blank; but to further provide against even accidental contact with glue I provide the wiper 16, to bear upon the wheel and keep it cleaned.

It will be understood that in operating the machine the glue-distributing mechanism will get covered with glue that cools and hardens; also, that the glue-wheel is depressed into the glue, and if left there over night will be locked in by the hardening of the glue. I consider it therefore of great advantage to have these parts detachable from the machine, and to this end I mount the glue distributing mechanism on the single block or plate H, as represented in Fig. 2, and this plate I attach to the machine, as shown in Fig. 1, the post *a'* in this figure being broken away in its center to illustrate the manner of clamping the block to the basin, for which purpose any ordinary clamp-screw, 14, may be used. By this arrangement the glue-distributing mechanism may be readily removed and placed in water while the glue is soft, and thus be cleaned, and also prevent being locked into the glue which cools in the glue-pan.

I claim—

1. In a gluing-machine, the combination of the suitable frame, and the wheel C mounted thereon, and a glue-distributing wheel mounted upon the plate or block, said plate or block being removably secured to the frame of the machine above the glue-pot, substantially as described.

2. In a machine for pasting blanks, of substantially the construction described, the block or plate H, having mounted thereon the guard 8, the wheel D, and wipers for said wheel, all substantially as stated, said block H being adapted to be attached to the main parts of the machine and detachable therefrom, substantially as described.

3. In a gluing-machine, the shaft *b*, adapted to permit vertical movement at one end, the wheel C, mounted on said end, and a spring arranged to depress the shaft and yield upward, as and for the purposes stated.

GEO. W. GLAZIER.

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