

R. N. B. CAMPBELL.
GLUE SPREADING MACHINE.
APPLICATION FILED AUG. 29, 1910.

982,348.

Patented Jan. 24, 1911.

2 SHEETS-SHEET 1.

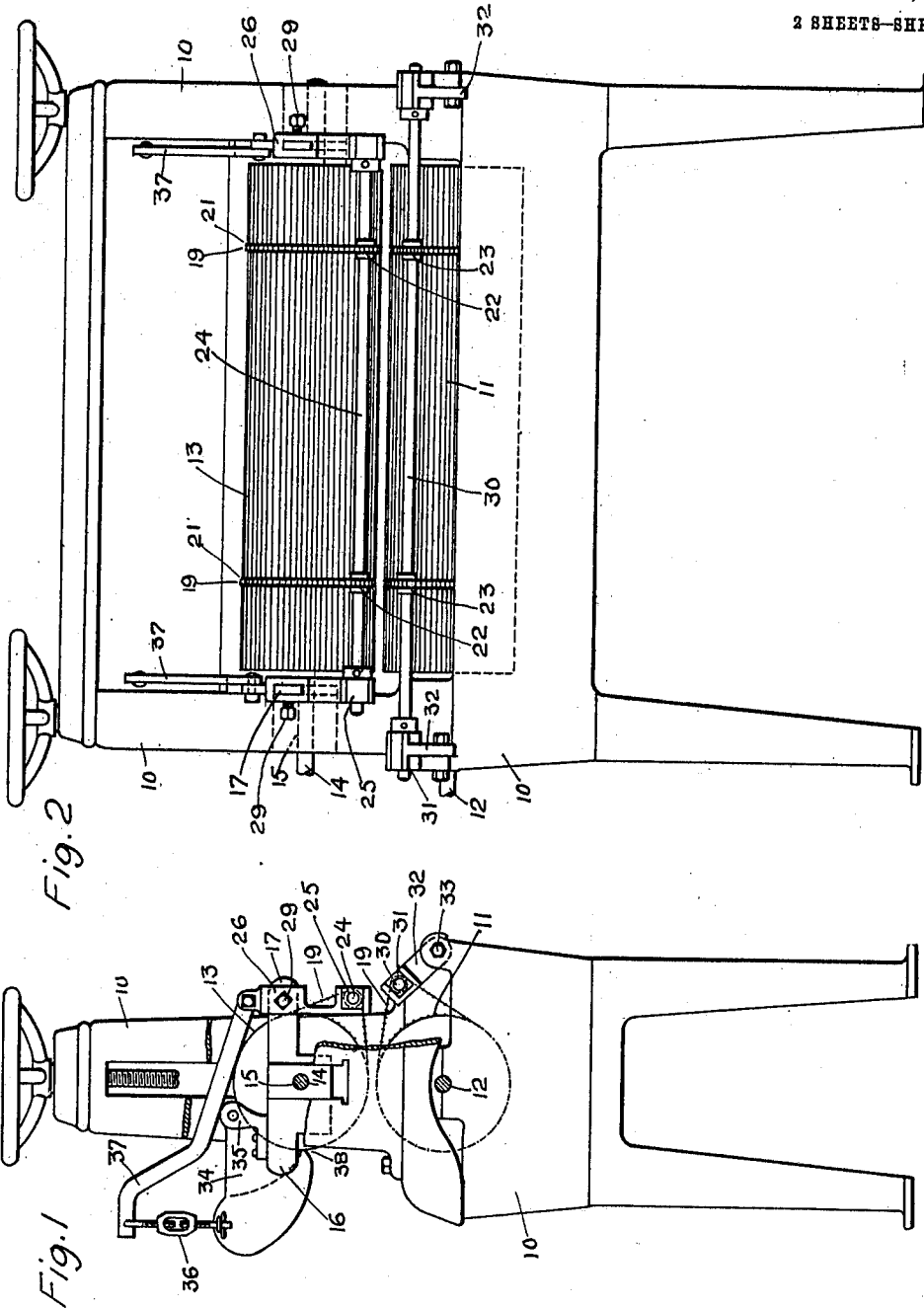


Fig. 1

Fig. 2

WITNESSES:

H. W. Meade
S. W. Aikerton

INVENTOR

Robert N. B. Campbell

BY

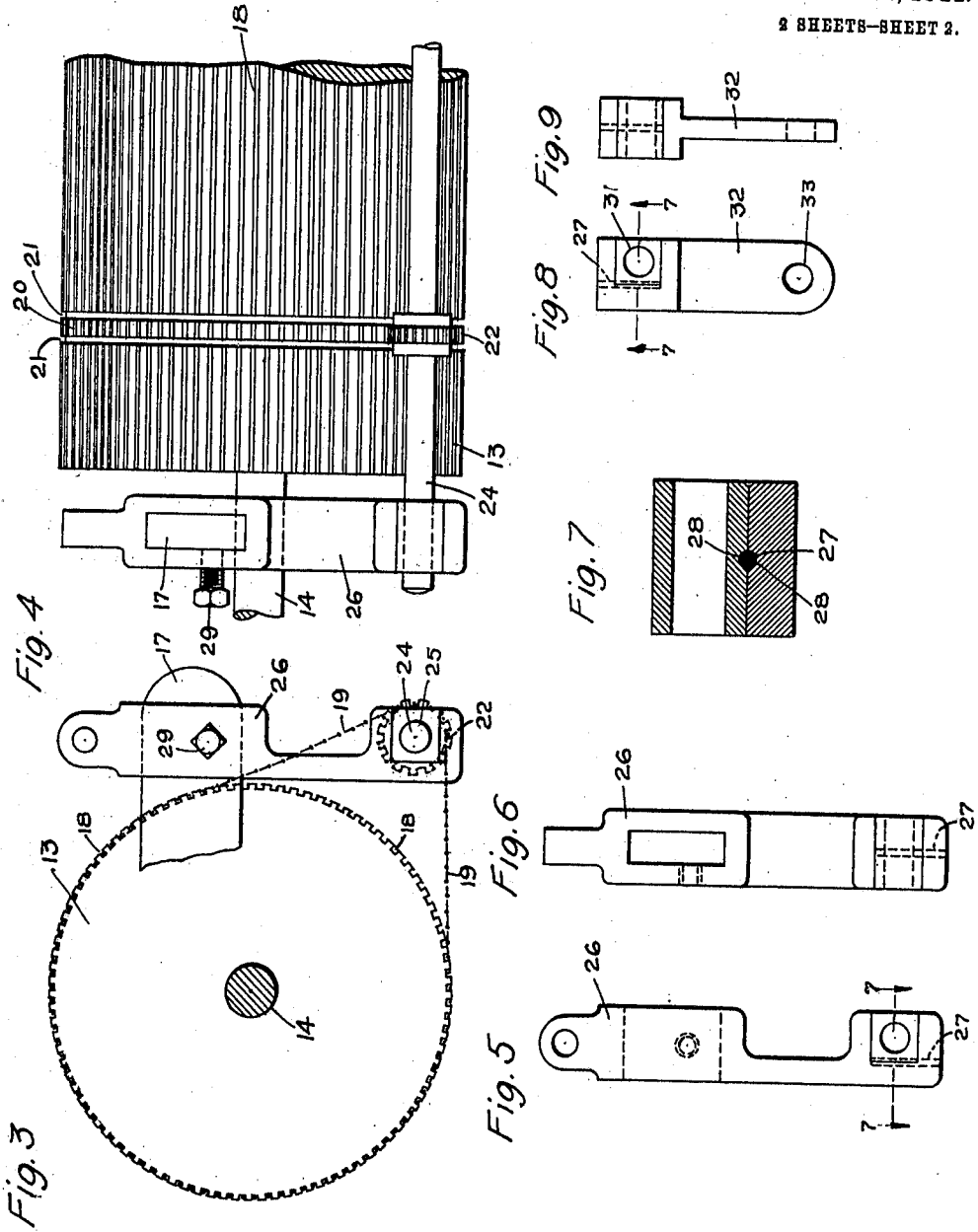
A. M. Wooster
ATTORNEY

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S. W. Arthur.
H. W. Meade.

INVENTOR

Robert N. B. Campbell

BY

A. M. Wooster
ATTORNEY

UNITED STATES PATENT OFFICE.

ROBERT N. B. CAMPBELL, OF DERBY, CONNECTICUT.

GLUE-SPREADING MACHINE.

982,348.

Specification of Letters Patent.

Patented Jan. 24, 1911.

Application filed August 29, 1910. Serial No. 579,524.

To all whom it may concern:

Be it known that I, ROBERT N. B. CAMPBELL, a citizen of the United States, residing at Derby, county of New Haven, State of Connecticut, have invented an Improvement in Glue-Spreading Machines, of which the following is a specification.

This invention has for its object to so improve the construction of glue spreading machines that thin veneers, cross banding or any pliable composite material comprised of layers of cloth, wood or pasteboard, variously disposed, shall be prevented from adhering to the rolls and caused to pass directly away from the rolls and which, furthermore, will effect a great saving in the amount of glue required.

Heretofore, in order to prevent the adhesion of thin veneers and pliable composite material to the rolls of glue spreading machines, it has been the practice to cover the rolls with carpet, which adds appreciably to the cost of production of veneers and composite material as the coverings require to be renewed frequently and considerable time is required to attach them, in addition to which the carpet covering causes great waste and loss of glue.

In order to avoid the necessity for covering the rolls and to effect an important saving by dispensing with the covers, saving the time required to attach them and preventing waste of glue, I have devised the novel improvements in glue spreading machines which I will now describe, referring to the accompanying drawings forming a part of this specification and using reference characters to indicate the several parts.

Figure 1 is an end elevation, partly broken away, showing the application of my novel improvements to a well known form of glue spreading machine; Fig. 2 a side elevation as seen from the right in Fig. 1; Fig. 3 an enlarged detail end elevation of the upper roll and the bracket for the chain carrying wheel; Fig. 4 a corresponding side elevation as seen from the right; Figs. 5 and 6 are respectively end and side elevations of an upper chain carrying bracket detached; Fig. 7 an enlarged detail section on the line 7-7 in Figs. 5 and 8, looking in the direction of the arrows; and Figs. 8 and 9 are respectively end and side elevations of a lower chain carrying bracket detached.

10 denotes the framework of an ordinary

glue spreading machine which will not be described in detail as specifically it forms no portion of the present invention.

11 denotes the lower roll whose shaft 12 is journaled in the framework and 13 the upper roll whose shaft 14 is journaled in bearings 15 which are vertically adjustable in the framework, said bearings being provided with arms 16 and 17, the purpose of which will presently be explained.

The rolls of glue spreading machines are ordinarily provided in their peripheries with longitudinal grooves 18. An important feature of my invention consists in providing the machines with carrying chains, indicated by 19, two carrying chains being shown in the present instance which are quite sufficient under ordinary conditions. These chains may be ordinary sprocket chains, and sprocket teeth 20 are provided therefor by making two parallel circumferential grooves 21 in the rolls for each chain, the grooves being the required distance apart to form the teeth 20 between the intersections of the circumferential grooves with the longitudinal grooves. The upper and lower carrying chains are made long enough to pass over sprocket wheels 22 and 23 respectively. Upper sprocket wheels 22 are carried by a shaft 24 which is journaled in bearings 25 seated in brackets 26 which are detachably secured to arms 17. These bearings slide longitudinally in the brackets and are retained in place when seated by pins 27 which engage half sockets 28 in the brackets and bearings, as clearly shown in Fig. 7. The brackets are adjustably secured in place on arms 17 by means of set screws 29 which pass through the brackets and engage the arms. Lower sprocket wheels 23 are carried by a shaft 30 which is journaled in bearings 31 seated in brackets 32 which are pivoted to the framework as at 33, and are locked in place after adjustment by tightening up nuts on the pivot bolts. Bearings 31 are retained in place in the brackets by pins 27 similarly to bearings 25. The operation of this portion of the invention will be obvious from the drawings. The chains make it impossible for a thin veneer or a pliable composite material of any character to follow either roll and adhere to it. After passing through the rolls, the veneer or other material will pass forward between the chains and out of the machine. It will be noted that bearings 25 and 31 are placed

far enough apart so that the sprocket wheels will cause the contiguous sides of the chains to diverge more or less from the rolls at any adjustment of the upper roll.

5 34 denotes a glue pot for the upper roll. This glue pot is pivoted to a bracket 35 which is bolted to arm 16. In order to provide a convenient adjustment of the glue pot toward or from the upper roll, I suspend the glue pot by means of turn buckles 36 from levers 37 which are pivoted to brackets 26. These levers rest upon brackets 35 and the delivery end of the glue pot, indicated specifically by 38, may be swung 10 toward or from the roll by adjustment of the turn buckles.

Having thus described my invention I claim:

1. A glue spreading machine comprising 20 a supporting framework, bearings mounted therein and provided with arms, an upper glue applying roll mounted in said bearings, additional bearings supported from the arms of the first mentioned bearings, a sprocket shaft mounted in said additional bearings, a sprocket chain connecting said roll and said shaft, a lower roll cooperating with the upper roll, a second sprocket shaft, and a sprocket chain connecting the 30 last mentioned shaft with said lower roll.

2. A glue spreading machine comprising a supporting framework, bearings mounted therein and provided with arms, an upper glue applying roll mounted in said bearings, 35 brackets detachably secured to said arms, bearings supported by said brackets, a sprocket shaft mounted in the last mentioned bearings, a sprocket chain connecting said roll and said shaft, a lower roll cooperating with the upper roll, a second sprocket shaft, and a sprocket chain connecting the last mentioned shaft with said lower roll.

3. A glue spreading machine comprising 45 a supporting frame work, bearings mounted therein and provided with oppositely extended arms, an upper glue applying roll mounted in said bearings, a lower roll supported by said frame work, sprocket shafts for said rolls, bearings depending from one arm of each of the first mentioned bearings

and supporting the upper sprocket shaft, sprocket chains connecting each roll with its respective shaft, and means for supporting a glue pot from the remaining arms of the 55 first mentioned bearings.

4. A glue spreading machine comprising a supporting frame work, bearings mounted therein and provided with oppositely extended arms, an upper glue applying roll 60 mounted in said bearings, a lower roll supported by said frame work, sprocket shafts for said rolls, a depending bracket removably secured to one arm of each of said bearings, bearings in said brackets for the upper sprocket shaft, sprocket chains connecting 65 each row with its respective shaft, and means for supporting a glue pot from the remaining arms of the first mentioned bearings, and means connected with said brackets for varying the position of said glue pot. 70

5. In a glue spreading machine upper and lower rolls each provided with longitudinal ribs and peripheral grooves intersecting said ribs to form sprocket teeth, sprocket shafts, 75 and chains connecting each wheel with its respective sprocket shaft.

6. A glue spreading machine comprising a supporting frame work, bearings mounted thereon, upper and lower glue applying 80 rolls, the upper roll being mounted in said bearings, sprocket shafts for each roll, removable brackets carried by said bearings for supporting the sprocket shaft for the upper roll, and carrying chains passed 85 around said rolls and shafts.

7. A glue spreading machine comprising a supporting frame work, bearings mounted therein, upper and lower glue applying rolls, the upper roll being mounted in said bearings, sprocket shafts for each roll, adjustable brackets carried by said bearings for supporting the sprocket shaft for the upper roll, means for adjustably supporting the other sprocket shaft, and carrying chains 95 passed around said rolls and shafts.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT N. B. CAMPBELL.

Witnesses:

A. M. WOOSTER,
S. W. ATHERTON.