(No Model.) 2 Sheets—Sheet 1.

G. B. SICCARDI.

WIG MAKING APPARATUS.

No. 553,433. Patented Jan. 21, 1896.

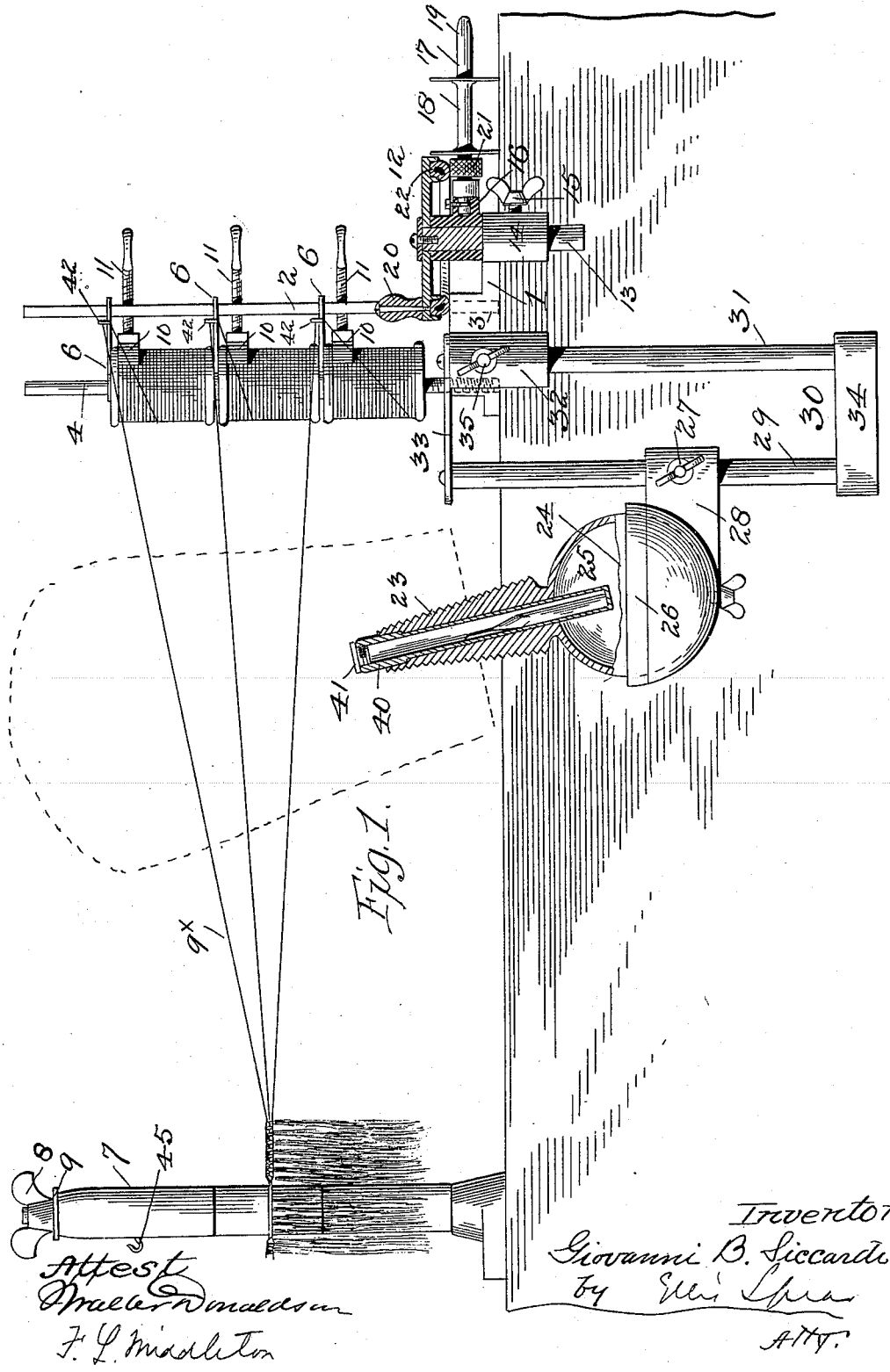

Fig. 1.

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(No Model.) 2 Sheets—Sheet 2.

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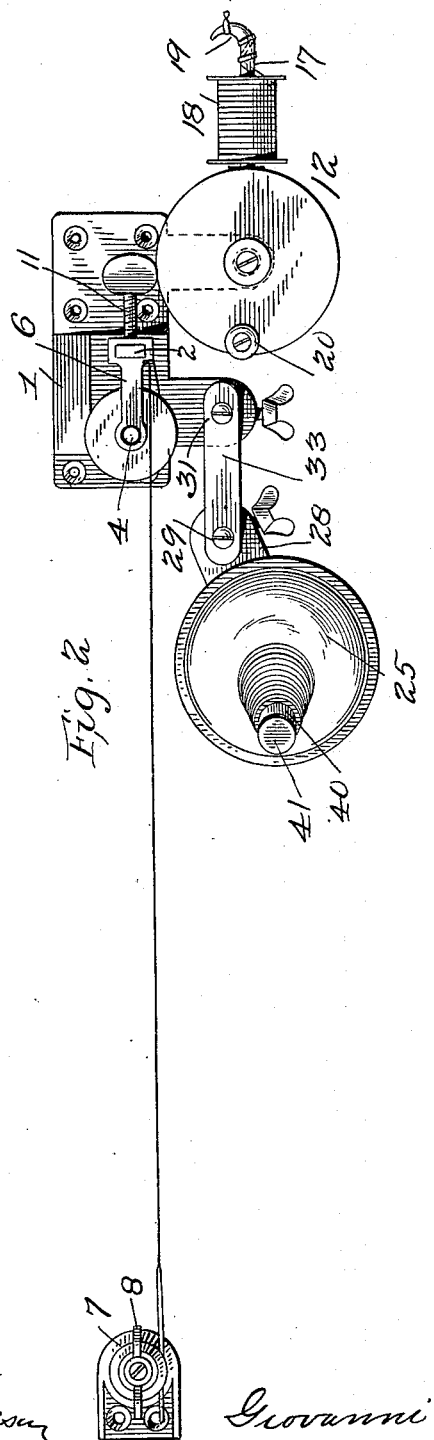

Fig. 2.

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UNITED STATES PATENT OFFICE.

GIOVANNI B. SICCARDI, OF WASHINGTON, DISTRICT OF COLUMBIA.

WIG-MAKING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 553,433, dated January 21, 1896.

Application filed November 13, 1895. Serial No. 568,828. (No model.)

To all whom it may concern:

Be it known that I, GIOVANNI B. SICCARDI, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Wig-Making Apparatus, of which the following is a specification, reference being had therein to the accompanying drawings.

It is the object of my invention to provide an apparatus for use in making wigs which will assist the operator in all the various parts of the work necessary in making a complete wig.

The invention comprises therefore means to assist in the weaving of the weft, means for twisting the switch and means arranged to swing and be adjusted vertically at the front of the table for holding the wig.

In the drawings, Figure 1 is a front view, and Fig. 2 a plan view, of the invention.

In the drawings, 1 is a base-plate adapted to be attached by screws or by a clamp to the edge of a table. 2 is a post extending upward therefrom, its lower end fitting removably in a socket 3 of the base-plate. Extending up parallel with this post is a spindle or axis 4 for the bobbins or spools 5, which are arranged thereon one above the other. This axis also is removable, its lower end being screw-threaded into the base-plate, and it is held against lateral displacement which might be caused by the strain resulting from the weaving of the hair by stay-rods or clips 6, which have rectangular openings to receive the post 2 and circular openings to receive the axis of the spools. There are three of these stay-rods and they rest loosely upon the tops of the spools. From these spools the threads extend to a stand or holder 7 made up of a base-piece adapted to be clamped or screwed to the table and a post extending up therefrom, the post having a screw-threaded upper end to receive a wing-nut 8, which, together with a washer 9, serves to clamp the cylindrical sections of the holder, which sections surround the post and serve to hold between their abutting ends the threads upon which the hair is woven. The holder is made of these cylindrical sections so that the operator may raise or lower the foundation threads and thus adapt the point of work as best suits her. The three threads with which the hair is woven are indicated at $9^{\times}$, and by simply loosening the wing-nut the weft may be raised or lowered as desired. The holder or standard is arranged at the left of the machine and the stay-rods heretofore mentioned are in the same plane with the weft. I provide clamps 10, consisting of semicircular shoes adapted to bear upon the thread of the spools and thus prevent the threads from turning and serving to hold the spools also against turning. After the operator has drawn the desired amount of thread therefrom these shoes, one for each spool, are adjusted by clamp-screws 11 passing through the rectangular post. After the operator has used the threads previously drawn from the spools the clamps of the holder are released and the complete weft is drawn through, thus drawing from the spools enough thread for carrying on the work, and then the clamps are set both at the holder and at the spools to hold the foundation threads firmly at both ends.

After the weft has been formed and it is desired to make a switch, the said weft is worked upon a suitable switch-core which is wound by a winding device shown at 12 and consisting of a post held rigidly in a socket 14, formed in the base-plate by a set-screw 15. This post has an enlarged upper head with a lateral extension 16, in which is journaled a spindle 17, the inner end of which is held by a set-screw passing through the extension and into a groove in the spindle. A reel 18 formed with the spindle holds the braid from which the switch-core is formed. From this reel the braid is carried to a hook 19, around which it is wound once or twice and then to the hand of the operator. The reel with the hook is turned by the operator grasping the handle 20 of the face-plate and turning the same, and thus imparting rotary motion to the spindle, reel, and hook by the friction-driving means 21 22, consisting simply of a rubber disk on the spindle engaging a rubber ring embedded in a groove in the under side of the face-plate. The operator holds the free end of the tape and turning the spindle with its hook causes the hook to wind flat tape into a cylindrical switch-core. After the switch has been formed the winding device may be turned aside out of the

way as the post with its lateral extension and spindle may be turned and set in any radial position desired. The next step in the formation of the complete article is carried out upon a block adapted to hold the wig, which block is supported upon a conical holder 23, carried by a ball-and-socket support 24, the latter consisting of a cup holding a hollow ball 25, and having a ring 26 screwed upon its upper edge to hold the ball in place with sufficient friction to rigidly fix the support in whatever position it may be adjusted. The cup is held adjustably by a set-screw 27 passing through its supporting-arm 28 and fixing it to a vertical rod 29 forming part of a swinging frame 30, which comprises a vertical shaft 31 passing through the projection 32 on the base-plate and attached to the vertical rod by upper and lower cross-pieces 33 34. This whole frame may be swung into any radial position, carrying with it the block-holder and block, and it may be set by a screw 35. In addition to this the cup has an independent radial adjustment on its vertical supporting-rod, and it may be fixed in any radial position by this screw. The block-frame may be raised and lowered as a whole to any desired position and the ball-and-socket support has a vertical adjustment on the vertical rod of the frame. By means of this double adjustment both vertically and radially together with the universal adjustment of the block-holder to any desired inclination the device may be set to meet all possible requirements of the work and the needs of the operator. The cone-shaped block-holder is grooved in order to provide a firm gripping-surface to receive the block. Its cone shape enables it to receive blocks of different sizes having different forms and sizes of sockets. The conical holder is hollow and is adapted to receive a hollow casing 40, which holds the needle used in said hairwork, and this casing is closed by a screw-cap 41. The weft-thread passes from the spools through guiding-eyes 42 formed on the stay-rods, and from these eyes the threads pass to the weft and thence to the sectional holder. The upper section of this holder is provided with a hook 45, which after a quantity of the weft has been formed is used to support the same.

It will be noticed that the several parts of the apparatus are necessary to a complete formation of the wig. The weaving portion is fixed above the table, the switch-winding portions supported in a part of the base-plate, which extends forward beyond the table, so that the supporting-post of this device extends below the upper surface of the table and the spindle extends laterally in about the plane of the table-surface, though it may be raised above this plane, and when not in use the spindle may be turned aside over the table, or the face-plate with the spindle may be removed entirely.

The double vertical adjustment of the supports of the block-holder enables the said holder to be raised above the table or depressed below it entirely out of the way, and for this purpose the swinging frame moves vertically in a portion of the base-plate which projects forward over the front edge of the table.

The ball-and-socket joint may have a set-screw to hold the cone-support in any inclined position.

I claim—

1. In combination, the base plate, the axis for the spools, the main post, the stay rods between the post and axis and means for holding the weft, substantially as described.

2. In combination, the base plate, the axis for the spools or bobbins, a holder for the weft, the main post and the clamps for holding the spools and threads against turning, said clamps extending from the main post and having semicircular shoes bearing on the spools or bobbins, substantially as described.

3. In combination, the base plate, the axis for the spools or bobbins, the post, the clamps extending therefrom to engage the spools on the axis, and the stay rods between the posts and axis, substantially as described.

4. In combination, the spool holder and the weft holder comprising the standard and the cylindrical clamping sections held thereon, said clamping sections being adapted to hold the weft at any desired height, substantially as described.

5. A weft holder having a post, a series of cylindrical clamping sections, and a clamping means at the top of the post, substantially as described.

6. In a wig making apparatus, a switch winding device comprising the reel having the spindle with the hook extension and means for turning the reel, substantially as described.

7. In a wig making device comprising the face plate the spindle with its reel and hook and the friction driving means between the face plate and spindle, substantially as described.

8. In a wig making machine, a switch winding device comprising the face plate having a grooved under side, a rubber ring embedded therein, a spindle extending laterally of the face plate, a rubber disk thereon and the reel and hook on the spindle, substantially as described.

9. In a wig making machine and in combination the base plate, the spool holders, the weft holder, and a winding device comprising the vertical post arranged adjustably in a socket in the base plate, a face plate turning on the upper end of the post, a spindle journaled therein, and extending radially and horizontally from the post and along the under side of the face plate, the reel and hook on the spindle, and the frictional driving means between the spindle and the face plate, substantially as described.

10. In a wig making apparatus, a wig holder supported on a universal joint, a swinging

frame upon which the wig holder is vertically adjustable and the base plate, said swinging frame being vertically adjustable in said plate and said wig support being also adjustable radially in relation to the swinging frame, substantially as described.

11. In combination, the base plate, the spool and weft holder extending upward above the plane of the base plate, a wig holder and a support therefor depending below the base plate and adjustable vertically in relation thereto by which the wig holder may be dropped out of the way in weaving the weft.

12. In combination, the base plate, the spool and weft holders, the swinging frame extending down through the front of the base plate and depending below the same, the wig support on said frame, said frame being adjustable vertically with relation to the base plate whereby said support may be adjusted below the table for the weaving operation, substantially as described.

13. In a wig making apparatus, a wig holder, a universal joint supporting the same, and a swinging vertically adjustable frame for supporting the wig holder, substantially as described.

14. A wig making apparatus comprising a weaving portion having spool and weft holders supported from base plates above the table and switch winding and wig holding portions extending down along the front side of the table and adjustable to and from operative position, said base plate having forward extensions to receive and hold the said switch winding and wig holding devices, substantially as described.

15. In combination, the spool holding axis, the vertical post, clamps carried thereby, the stay rods or clips and the thread guiding eyes on said clips, substantially as described.

16. In combination in a weft holder, the standard, the sectional clamping cylinders and the hook on one of said sections, substantially as described.

17. In combination, the wig block holder, the swinging frame consisting of the shaft 31 and post 29 connected together at their lower ends by the cross piece 34, and the brace piece 33 between the upper ends of the shaft 31 and post 29, the said block holder being adjustably connected with the post 29, substantially as described.

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

GIOVANNI B. SICCARDI.

Witnesses:
WALTER DONALDSON,
HENRY E. COOPER.