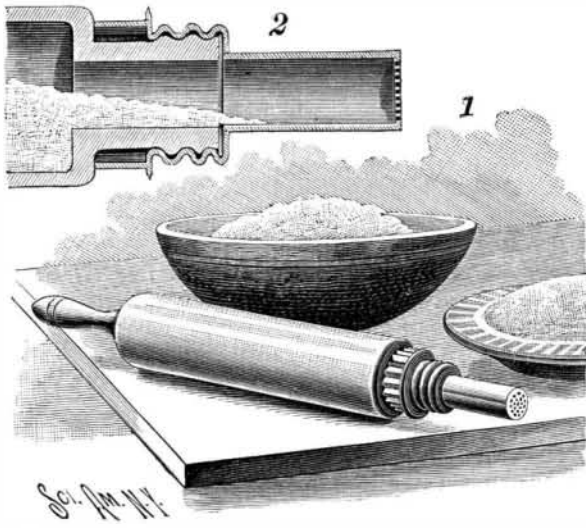


A ROLLING PIN, ETC., FOR BAKERS' USE.

A rolling pin with which is separably combined a cake cutter, pie crimper and edge dresser, and a dredge box or sifter for flour, forms the subject of a patent which has been issued to Mrs. Jane L. Landrith, of Marshfield, Oregon. The device is shown in perspective in Fig. 1 and in longitudinal section in Fig. 2. One end of the rolling pin has a handle formed integral with the body in the usual style, and the main portion is hollow, forming a capacious flour receptacle. The opposite end has a reduced screw-threaded hollow extension, designed to receive and removably retain a threaded handle piece, preferably of tin, having an outer perforated cap plate, through which flour may be sifted from the central chamber. A radial thin flange is formed at the inner edge of the threaded portion of the handle piece, to which is affixed a fluted



MRS. LANDRITH'S ROLLING PIN, ETC., FOR BAKERS.

short band or ring. The cylindrical portion and one handle of the utensil are preferably made of glass, as a cool and non-absorbent material which does not retain the dough, to trim the excess of which from the edge of a pie plate the handle piece is removed and its thin flange used to cut off the surplus, the fluted ring at the same time impressing or crimping the edge of the pie. This fluted ring is also adapted to cut cake dough that has been rolled to the proper thickness, forming a serrated edge.

A SIMPLE AND COMPACT TYPE WRITER.

The machine shown in the illustration can be readily operated by one not familiar with type writing, and is specially adapted for the individual or private use of those not employing professional type writers. It can be made at a low cost and is very compact, its base being only about five by nine inches in size, and the dial plate about four inches in diameter. Fig. 1 is a view of the machine in perspective and Fig. 2 is a central vertical cross section. The paper carriage at the back has a flat lower portion which moves in keepers on the base, and has a rack on its inner side which is engaged and moved by a spring pawl, the notches on the rack each corresponding to a letter space.

In the carriage is mounted a rubber roll which serves as a feed roll and a printing platen, the roll having a thumb piece at one end by which it is revolved, and a ratchet preventing backward movement, while the front upper portion of the roll is loosely clasped by flat springs secured to the carriage, to hold the paper in position and allow it to be fed forward.

Fixed centrally on the base to overlap the paper carriage and roll is an inclined drum, surmounting which is a dial with a notched flange bearing the various characters to be printed, the notched flange serving as a guide to the printing lever, and causing it to descend accurately for each character. Within the drum near the top is a three-armed spider, and below is a central cross arm, both centrally perforated to receive a vertically movable shaft. A central vertical tube has a slot near the top, beneath which extends an arm having lugs at its end, between which is pivoted the printing lever, the inner end of which is connected with a vertical shaft extending downward through the tube. Fixed to the lower end of the tube, and necessarily revolving with it, is a wide flanged hub, carrying an annular plate, the outer portion of which is slit radially to form flexible type fingers, carrying type or characters on their under sides near their outer ends, the upper and lower case type of each letter being produced on alternate fingers, a portion of this plate being shown in Fig. 3.

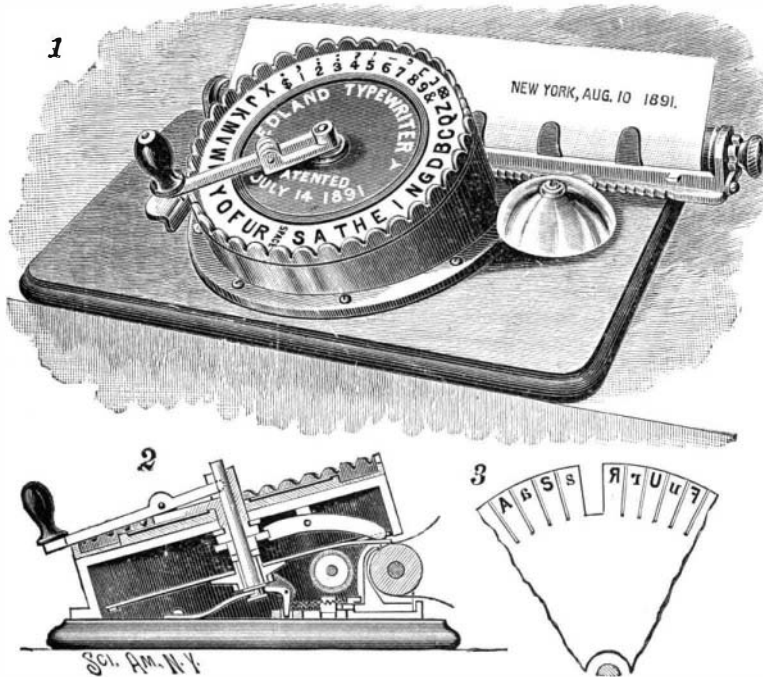
A sleeve moves vertically on the tube and is held to the shaft by a pin, moving vertically with the latter and revolving with the shaft and tube. Pivoted between lugs on the underside of the spider, as shown

in Fig. 2, is a curved lever, whose inner end is slotted to clasp a flange on the sleeve, while its outer end extends to the outer ends of the flexible type fingers, so that when the sleeve is raised by the depression of the printing lever the outer end of the curved lever is depressed, causing a character to be printed upon the paper by the flexible type finger immediately beneath. The central shaft and the printing lever are returned to normal position by a spring, one end of which is fixed to the base, while its opposite end engages flanges on the bottom of the shaft. An elbow lever pivoted on the base and a similar lever pivoted on the cross arm of the drum are so arranged, in connection with a spring, that each depression of the printing lever causes the paper carriage to move the distance of one notch, or the space of a letter. When the printing lever is held down the carriage may be freely moved backward to position for commencing a new line. Although the dial shown in the illustration bears only upper case type, it is to be remembered that there are alternate upper and lower case type fingers, the latter being those normally employed, but on depressing a thumb piece shown at the left in the picture, upper case characters will be printed. Ink rollers are pivoted on the inner sides of the drum, in the path of the type on the fingers. This machine has comparatively few pieces, so that it will not readily get out of order, and for its operation it is only necessary to place the paper in position, bring the printing lever above the characters to be printed, and press down on the lever.

This type writer has been patented by Mr. Joe L. Edland, of No. 73 Fourth Avenue, Brooklyn, N. Y.

Silkified Cotton.

The invention of C. Brodbeck, Paris, consists in applying a solution of fibroine of silk to fabrics, threads, or fibers which have been scoured, lixiviated, and bleached, and the tissues calendered by friction and beetled. They are then hydrated and physically modified by passing them through a solution of caustic potash or soda of 1.35—1.40 sp. gr., or of sulphuric acid of 1.53—1.56 sp. gr. In both cases a low temperature of 4°—8° C. is required. If animal fibers are present, no caustic alkalies can be used. Cellulose is by this treatment freed from most of the impurities which it contains when imperfectly bleached, which renders the fixing of the silk easier and more perfect. After careful washing and drying the fabrics or fibers are treated with concentrated solutions of silk, the fibroine being dissolved either in hydrochloric, phosphoric, or sulphuric acid, or in pure cuprammonium, etc. If the solution of silk is effected in more or less hydrated sulphuric acid, the temperature must be about 0° C., to avoid decomposition. Silk in any form may be dissolved; hence scraps, cocoon silk, waste silk, and other material which was hitherto practically useless may thus be utilized. Previous to silkifying cellulose fabrics they should be subjected to the action of a metallic



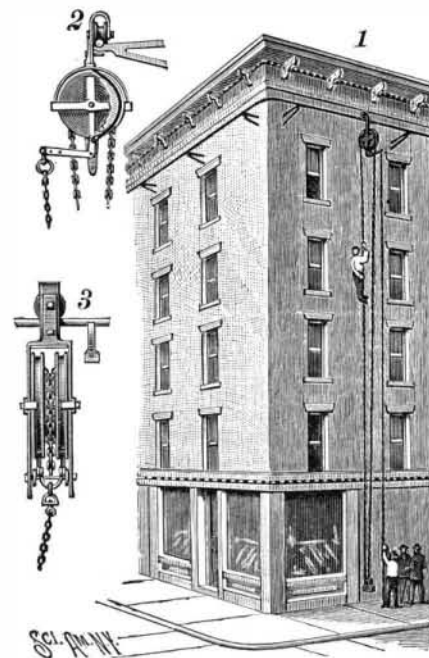
EDLAND'S TYPE WRITING MACHINE.

or tannic mordant, the selection of which depends on the color which the fabric is to receive. This is of advantage in combining the silk more intimately with the cellulose. The impregnation with the silk solution is effected by passing the material through a tightly closed impregnating apparatus with only two openings, one for the inlet and the other for the outlet of the material. It then passes through a hot air drying apparatus, and subsequently through a second vessel containing liquids with which the solvents employed combine, the silk being thereby precipitated upon and fixed in the pores of the fibers. The material is then washed and dried. Should it be desired to increase the amount of silk, the silkifying process may be repeated

as often as desirable. Materials rendered silky in this way may be bleached by the same means as those employed for real silk. All fabrics which have been treated by this process must be subjected to a mechanical finishing, beetling, calendering, rubbing, brushing, polishing, and pressing according to the purpose for which they are destined, in order to impart to them a glossy appearance and silky feel.

AN IMPROVED FIRE ESCAPE.

A device, capable of being expeditiously manipulated, to lower persons in safety from the upper floors of high buildings to the ground, is shown in the accompanying



VIEREGG'S FIRE ESCAPE.

illustration, and has been patented by Mr. Henry Vieregg, of Grand Island, Neb. A public test was recently made of this device on a high building at Grand Island, with results so entirely satisfactory that its merits were made the subject of a special testimonial, which was signed by the mayor and chief officials, engineers and members of the fire department, and many prominent citizens.

The body of the device consists of a drum mounted to turn in a frame, an upwardly extending member of which has a hook or loop extension carrying a grooved pulley, as shown in Fig. 2, the pulley being adapted to travel on a track held in brackets beneath the cornice of the building, and being prevented from leaving the track by a pin projecting horizontally beneath the track from the upper member of the frame. A guide frame is horizontally secured to the frame, the lower ends of the sides of which are united by a bar, and the drum is journaled at the intersection of the guide frame with the side pieces of the main frame. The drum has marginal flanges and two spaced central flanges, forming a central annular channel of reduced diameter, in which is passed an endless chain, as shown in Fig. 3, cleats or studs projecting into this channel from the side flanges to engage some of the links of the chain and prevent its slipping upon the drum. The chain is designed to reach nearly to the ground, where it passes around a pulley journaled in a heavy block, having a handle, whereby parties on the ground may draw the chain outward to facilitate the safe descent of parties from a building, such descent being made by simply gripping the chain, or any approved form of harness may be employed to be hooked to the chain links. To control the descent, strap brakes are employed, engaging the larger sections of the drum between the marginal flanges at each side, the lower ends of the straps being connected with the inner ends of levers pivoted on the lower cross bar of the frame, the outer ends of the levers being connected by an adjustable bail with a ring and swivel, from which a brake chain depends. By this means the brakes may be applied by the party descending, or by one upon the ground below, to regulate as desired the speed of descent.

THE enormous mass of extra dead weight due to the carrying of the boiler, fuel and water in the old locomotive will be entirely unnecessary in the railways of the future, which will be propelled electrically. Unquestionably the future electro-locomotion will show a motor on every axle, or, at any rate, upon two axles of each car, and every car running as a unit, in which case they can run coupled together in a train or not, as may be convenient.—*Philadelphia Press*.