

Improved Hoop Skirt Frame.

The close competition which exists in some branches of trade, renders it extremely necessary that no device or expedient which will facilitate business should be left unadopted. This is particularly true of hoop-skirt manufacturing, where the successful prosecution of it depends so much upon the amount and quality of the work an operator is able to perform in a given time. The skirt frame herewith illustrated, is a great improvement upon the old ones in general use; as it occupies very much less room on the floor, and is further desirable in that it combines in itself all that is necessary to finish a skirt quickly and thoroughly.

The frame, A, is mounted on a post, B, and revolves freely about it. This post is fixed in the stand, C, and of course is rigid. The ribs of the frame, A, unite at the bottom in a circular base, which has a cross-piece, D, to center the frame, and also strengthen it; and the cross-piece is retained in its place by the pins, E. The reel, F, on which the hoop wire is wound, is contained within the frame, and also revolves easily about the post, B. These are the main features of the invention.

The objects of it are, that all parts of the skirt, and the materials for making it—such as the wire, tapes, &c., on the frame, convenience for gluing the tapes prior to fastening them permanently with metallic clasps, the arrangement of the wire reel within the frame—are entirely under the operator's eye and hand, and save much time and labor to all. The skirts, when finished, are hoisted up over the frame, and suspended from the ceiling by a cord; this disposition of the work keeps it in perfect shape, and does not displace the tapes, as in the old method of removing the skirts when glued—gathering them up in a mass, and hanging them on the wall. So also with the reel—many advantages are obtained from placing it in the position shown in the engraving, instead of below the skirt frame near the floor, as is the case in other skirt frames, where the clean wire is soiled by dust and glue which drop upon it. It is also feasible to use two different kinds of wire on this reel—a feature which, we are assured, is impossible in ordinary frames. The wire also runs off at a regular and even rate of speed, as it is used by the operator; and is not in the way, nor does it require to be pulled off; but is readily controlled as required. The cross-piece of the frame, at the bottom, may be instantly removed when necessary to fill the reel with wire, or for any other purpose, by simply withdrawing the wooden pins; the frame may then be lifted off clear of the pedestal. These features render this frame a very convenient apparatus. It was patented through the Scientific American Patent Agency, on June 9, 1863, by James F. J. Gunning, of New York city. One half of the patent has been assigned to S. T. and A. T. Myer. Further information can be had by addressing the patentees, at 401 Broadway, New York.

THE OLLIER PATENT FOR SECURITY PAPER.

This patent, issued June 9, 1863, to J. P. Ollier, of France, was granted for "new and improved methods of making a security paper, to prevent counterfeiting of bank-notes, &c., as well as alteration of

public and private writings; and applicable to an opaque pasteboard for playing cards, railway and other tickets." The Ollier paper is now secured by patent in all the principal countries of Europe, and has been adopted by the national authorities in several, while pending negotiations promise to extend its utilities still further. It is adopted by the Bank of France, which may be regarded as the mother of this invention; since it was under its direction, supervision, and actuation, and to satisfy its necessities, that the experiments were instituted and carried on, which culminated in success.

The Ollier paper is a fabric, distinct in idea, manufacture, and appearance, as well as in its properties, from every other paper previously known. Beautiful in texture and appearance, extremely pliant and durable, and, by its unmistakable external peculiarity, offering a sure warrant of authenticity; this

not be produced except by one process, known only to Mr. Ollier. It cannot be imitated by photography—cannot be destroyed by chemical action—defies use—foils imitation—and (so long as one particle of the fabric remains) shows itself as an unanswerable proof that the bill came only from one source, and must be genuine.

The interior layer, when colored with a volatile ink, forms a safety paper, which perfectly opposes any alteration of what may be written upon it. When the ink of the writing reaches the middle layer (which it is sure to do), any agent or solvent, used to obliterate the inscription, instantly decolors the interior coat as well, and leaves an ineffaceable sign of fraud upon the surface. The surface being originally white, no interior color can be introduced when it is once abstracted; and any attempt to erase the writing by scratching, uncovers the middle coat, and

leaves a blue or black blotch where the attempt is made. The whole sheet cannot be bleached, for the water-marks, clouded and clear, cannot be restored. At once will be seen the vital interest of this paper to all who desire to execute writings that depend upon their immunity from alteration for their legality. Wills, deeds, bonds, mortgages, certificates, checks, drafts, promissory notes, bills of exchange, and writings of a commercial or public nature, by this paper are secured from fraud.

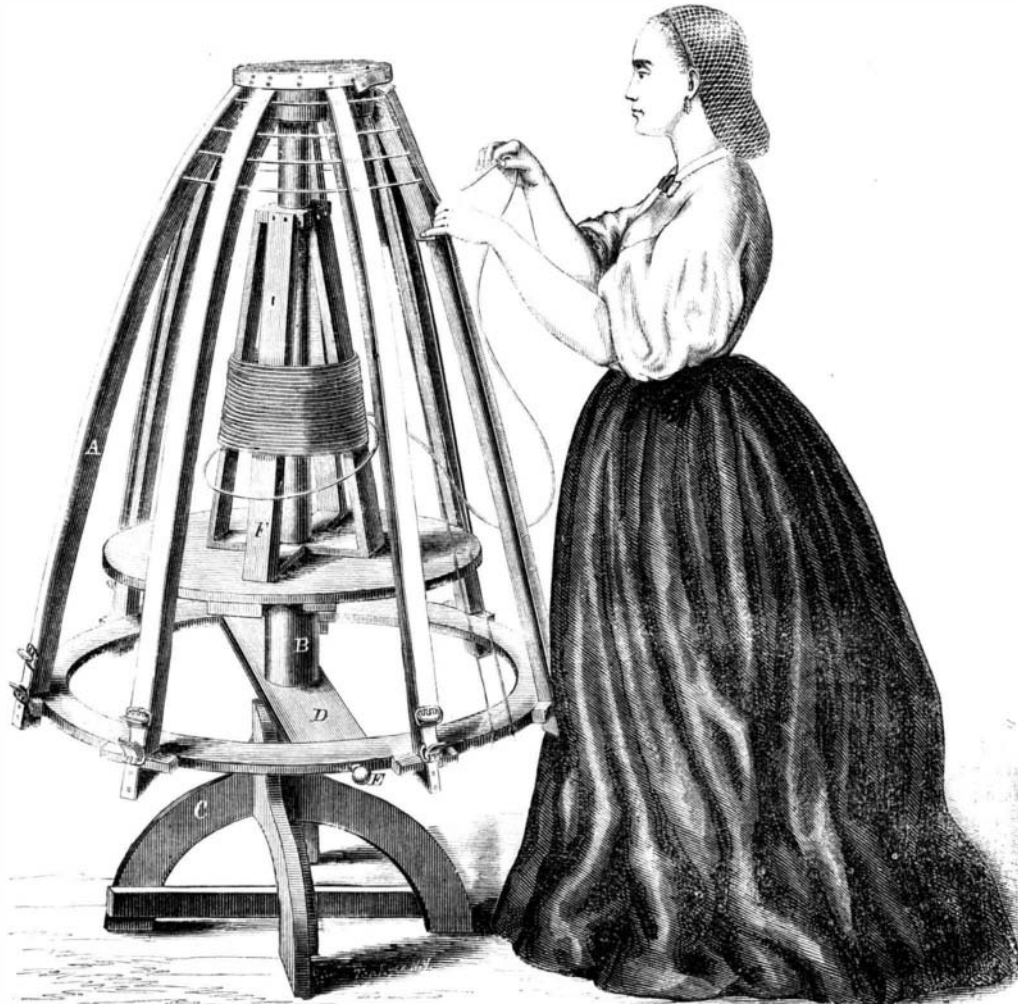
When the middle layer is thickened and deepened, and enclosed between denser layers, it forms a beautiful white pasteboard, glossy and smooth as ivory; and, no matter how thin, perfectly opaque to the strongest light. Cards may be made from it wholly white, like leaves of ivory, save the face; and since they are formed of a pasteboard throughout, not liable to warp or split, like the ordinary cards, which are composed of two or three sheets, glued together. This pasteboard may also

be water-marked, and thus used for tickets, which cannot be counterfeited.

The last branch of this patent includes the production of a commodity not elsewhere found in the trade: i. e., a paper made from hemp, wonderfully thin and tough, yet bearing a distinct water-mark, and capable of taking a perfect impression of the finest steel engraving, dry. This is owing to a peculiar ingredient, mixed with the paste. Nothing like this fabric exists in the trade; and its unparalleled strength, pliancy, and durability, as well as its peculiar properties, must speedily make it a desideratum in the useful arts.

Any further particulars may be learned by personal interview with Edmond Gastinéau, 21 Pearl street, New York.

OIL CREEK RAILROAD.—The Erie (Pa.) *Dispatch* states that this road is doing an immense business for one of its length. It brings out to Corry not less than 2,200 barrels of oil daily, and its mixed freight going South will average nearly half that amount of bulk. The completion of the road from Titusville to Oil City, is being pushed forward as rapidly as the scarcity of labor will permit. Four miles of the route beyond Titusville are ready for the iron, and the remainder will be graded and the track laid down by the 1st of September next.

**GUNNING'S PATENT HOOP-SKIRT FRAME.**

valuable product of French ingenuity and skill fulfils every condition demanded in a security paper.

The Ollier paper is made at the form, by hand; like the paper now used by the United States Treasury Department. It is composed of three layers—a colored enclosed by two white ones—which, being united on the form before drying, constitute a single inseparable sheet. The middle colored layer is the distinguishing feature of the invention; and according to its nature, are the different qualities that adapt it to various uses.

The paper intended for bank-bills, has its interior layer colored with an indelible substance, which resists the bleaching action of acids, and which produces a beautiful and ineffaceable water-mark, or filigraine, resembling an engraving, in the middle of the paper. In the varying thicknesses of this coloring arise the clears and shadows of the drawing, which are distinctly perceptible when the sheet lies horizontally, in a brighter tracery of white than the general surface, and which, on the contrary, are black when the sheet is held vertically. When lying flat, the surface is marked with a distinct drawing, boldly relieved from the general tone of the paper, and exactly similar on both sides. But the grand peculiarity of this paper is, that every effect shown at the surface, is reversed when the sheet is interposed between the eye and the light. This effect can-