

Machinery and Appliances.

A NEW MACHINE FOR MEASURING AND FOLDING FABRICS.

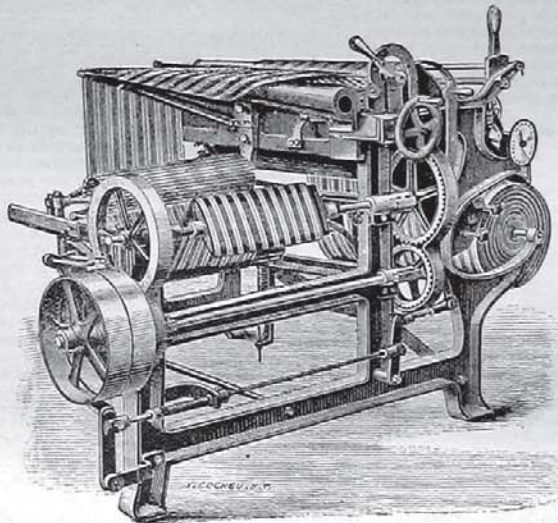
A thoroughly reliable machine for folding and measuring textile fabrics in the various textile industries has long been a desideratum. Various machines have been constructed for the purpose, but in one respect or another have proved incomplete or imperfect or otherwise complex and liable to get out of order. There is no question that a well-constructed machine, capable of being arranged to fold every sort of work, to register the lengths accurately, to stamp the lengths at any distance required, and to put terminal stamps upon them would be greatly esteemed, and would prove a boon to many branches of the trade. Our American cousins have shown at various times considerable skill and ingenuity in this line of mechanical construction, and therefore it may not be time wasted in looking across the Atlantic for a solution of the problem.

We show here a novel machine, lately introduced to the public, for measuring and folding fabrics at

durable, save labour, prevent all unjust claims for shortage, and by rigidly accurate measurement, enable the manufacturer to bill all the goods made.

The goods are measured without any tension, registered, folded lengthwise, and rolled, in a single operation. A piece of goods put up on one of these machines, having the licence stamp on each end of the fabric, cannot be cut without the fact becoming known. After cutting, the registered measurement shows what remains without remeasuring. More than two million pieces of single and double fold fabrics are put up annually on this machine, and it has never been known that a piece has been incorrectly measured or a claim allowed. The machines claim to effect the prevention of claims for short measure, and the saving to manufacturers of the quantity more than table measure, usually given with each piece.

The machines require only one young man to attend them, and put up any width of single or double-fold cotton or woollen fabric, tickings, cretonnes, upholstery goods and carpets. The builders claim "the only reliable method of measurement for single or double fold elastic fabrics by machinery."



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one operation and for marking the names upon the goods. It is claimed for the machine that its use has already been proved very economical to manufacturers and finishers in putting up many kinds of textile fabrics. It is adapted for use on all goods which are either rolled on sticks or tubes, or lapped on boards. The form of machine here shown, at one operation, measures, marks the measurement in yards and quarters upon the fabric, doubles the same lengthwise with even selvages and rolls into merchantable packages. It is intended especially for use on silerias, linings, satines, dress goods, tickings, wide woollens, &c.

Other forms of this machine omit the doubling mechanism and merely measure, mark, and roll the goods, and have proved especially valuable in putting up carpets, woollens and chevits.

It is not necessary to mark fabrics where for any reason it is objectionable to do so. All machines are provided with a novel counter which registers the exact measurement of the goods and serves as a perfect check on the marking mechanism. Many testimonials from users of these machines show that they are

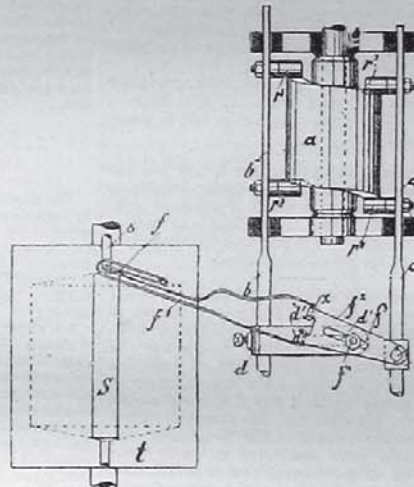
SPOOLING MACHINE FOR CROSS-SPOOLING.

In order to wind so called cross-spools, which are spools where the threads are crossed at a large angle, the thread, as is well-known, has to be moved quickly backwards and forwards, and gradually on to a smaller length. In order to avoid shocks in the traverse motion, it was found necessary to make the number of turns in such a machine smaller than in the ordinary spooling-machines, whereby its power was much reduced. It was also difficult to get the thread into the quickly moving guider.

A continental machinist has set himself the task of making a machine without these faults, and at the same time obtaining a large number of turns. He claims to have done this in the spooling arrangement shown in the accompanying sketch. The figure shows the arrangement with the spools in outline just commenced.

The drum *A*, the ends of which are made like the surface of a screw and which is continually rotating, seizes the rollers *R*¹ and *R*² which are connected with the rods *B* and *C*, thereby

causing the latter to move up and down lengthways. On these rods are fastened two iron frames *D* and *E*, the former possessing the slit *D*¹ and the latter with the pivot *E*¹. On the pivot *E*¹ the little lever *F*¹, which supports the thread guider *F*², is so arranged that the pivot *F*¹ screwed into the slit *F*² may also fit into the slit *D*¹. The part *F*¹ which is either bent out of wire or stamped out of a plate and which conducts the thread *F* is fastened to *F*² in such a way as to be moveable at *X*, so as to be able, on the one hand, to rise correspondingly with the growth of the spool and on the other hand to place the thread on laying it in, so that the slit which guides the thread may be almost vertical over the pivot of *F*¹ and may only make a smaller movement so as not to hinder the laying in of the thread. As the thread *F* lies farther from the pivot of the part *F*¹ with an empty spool than with a full one, so it will be laid on a smaller length, the more the spool grows, by which at the same time the conical tops of the spools are made. In this arrangement the bed of the drum *A* and consequently the whole body of the machine do not get struck, because with the turning back movement of the rods *B* and *C*, they are lifted up reciprocally and blows prevented. The drums *T*, on which the spools lie



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under pressure, move the spools round in the ordinary way by friction, and always at the same speed.

This arrangement may contain some suggestions for some of our readers.

A conspicuous instance of how vain is any effort to turn aside the flowing tide of trade is found, at this moment, in the failure of silk culture in California. On the authority of the *Textile Mercury*, a capital weekly journal for textile manufacturers lately started in Manchester, it is said that the Governor of the state has vetoed "an appropriation of 10,000 dols. made by the Legislature to carry on experiments in that direction, the reason given being that California cannot compete with China or Japan in that industry." There, if anywhere, it seemed as if success in diverting established trade could be assured. Favoured by the tariff and assisted by the state, popular with the press and untiringly pushed with skill that business men might almost envy by a number of influential ladies, American silk for American wearers might have been thought to have a happy future before it. But just as the Consumers' League will fail to affect the labour market, and just as Mrs. Partington did not succeed in keeping back the Atlantic with her broom, so has the California Silk Culture Association been defeated because it could not control the silk supply of China and Japan, and the silk workers of France and Italy besides.—*Warehousemen and Drapers' Trade Journal*.