

Sir Thomas Lawrence's "Mrs. Siddons." Closing as it does, the magazine's fifty-eighth volume, this number contains the final instalments of several series such as Paul L. Ford's "Many-Sided Franklin" (which treats this month of the Politician and Diplomat), and Marion Crawford's "Via Crucis," and Prof. Wheeler's "Alexander the Great." A link between the old volume and the new is supplied by Capt. Joshua Slocum's four papers describing his unprecedented circumnavigation of the globe in a forty-foot sloop, of which he was "cook and captain, too," as well as mate and crew and steward. The second instalment, this month, takes the gallant skipper from Pernambuco, Brazil, to and half way through the Strait of Magellan, where he has a brush with the savages, whom he frightens off with a gun by day and carpet-tacks by night.

We have received the Blue Book, Textile Directory, edition of 1899-1900, and a perusal of its contents shows the great activity that has prevailed in textile lines in the United States in the last year. Many new mills have been built, numerous improvements and additions have been made, and others are in progress. The textile maps, which have become a valuable feature of this book, have been revised to date, all new towns in which textile mills are located having been added, and the towns where mills have gone out of business have been removed from the maps. In the cotton mills this year, there has generally been given the number of ring and mule spindles operated, instead of simply the total of spindles, as formerly. All the former features so well known in this work have been continued. The combinations, namely, the American Woolen Company, the American Felt Company, and the American Thread Company, as already perfected, which have absorbed a large number of textile mills, are fully described in the work. The Davison Publishing Company, 401 Broadway, New York. Price; office edition, \$3; traveler's edition, \$2.50.

OILING FLY FRAME SPINDLES.*

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In presenting the subject of the oiling of fly frame spindles to this association, I attach more importance to it possibly than many other members because my experience at one time brought very forcibly to my attention one of the evils attending it. I refer to an occasion when I was called upon to locate the cause of certain stains in the goods. I do not doubt that a great many of the members are able to fix at once on the true cause of any oil stain that may appear in the cloth. I have only to say that in this particular case the cause had not been found. The particular stain to which I refer was in the filling. I adopted the rough method of ascribing the trouble to the weave-room and insisting that the overseer should stop it and should do so promptly. This brought from the overseer of weaving several cops with stains in them. Going to the overseer of mule spinning, and now reinforced by the stained cops as evidence of guilt, I made the same demand upon him. This brought from him the roving which was the cause of the trouble. We were now getting nearer. I had located the particular card-room which was doing the mischief. I will say that I was sincere in my first attempt to lay the blame on the weave room, as I had supposed that the stain was produced in an old steam box from the dripping. Having at last driven the trouble back to the carding department, I went over the matter with the overseer, and finally the trouble was located. The intermediate bobbins were very old—were all cracked and all oil soaked. I found that the oil worked through the cracks and stained the first layer of roving, where it touched the bobbin. This was not noticed. In

fact it could not be, as the stained part was always concealed. Throwing out nearly all the bobbins and putting new ones in their places was the next thing, and the oil stains were reduced until from five bales weekly of oil-stained goods, they **entirely disappeared**. I have thought that it might be interesting to some of the members to show samples of cloth containing stains of the character I mention. I have therefore taken bobbins and drawn a line of black oil on their surface so as to produce the same effect as that from cracked and oily bobbins. I have then had the roving made into filling and woven.

No. 1 contains filling which was stained on the slubber bobbin.

No. 2 contains filling stained on the intermediate bobbin.

No. 3 contains filling stained on the fly frame bobbin.

I have also prepared sample No. 4, in which the filling was stained in the cop by a streak in the side. An examination of these stains with the knowledge of their causes will enable a person to locate promptly the cause when the stain appears in the cloth room. I have had one occasion since when I was able promptly to locate the cause of the stain in the goods.

Not long ago a bobbin maker told me of a complaint that came to him of yarn being stained by oil from filling bobbins which he had just furnished a mill, and an examination of the work showed the trouble to be in the cracked bobbins in the card room. The occurrence, which I have narrated above, led me to take considerable interest in the subject of oiling fly frame spindles. I find several builders have self-oiling or magazine steps for the spindles. There is also the well-known Jackson method, which has many friends. The Lowell Machine Shop has an improved shape for the top of the spindle. All of these forms, however, like the common forms, require oil to be put on the spindle and on the bobbin gear. These parts must be oiled, of course, and in all cases oil is likely to fly out on to the rest of the machine, and the bobbins are sure to get more or less oil in them. There is, however, a method which was patented by Mr. Leander Shepard, and lately sold to the Saco & Pettee Machine Shops; which seems to do away with this trouble. The oil is in a magazine in the bolster tube, and oil the spindle near the top of the tube. An opening filled with a fibrous substance also allows oil to pass to the bobbin gear. In addition to this, all the bolsters are connected by tubes and then with a central oil receptacle. In this way all the spindles and all the bobbin gears in a roving frame can be oiled from one point, namely, a receptacle located near the centre of the machine.

We have one slubber and one fly frame fitted with this arrangement that have been running successfully for nearly two years. I trust that the Saco & Pettee Machine Shop people will perfect the arrangement and present it to the manufacturing public.

THE USE OF ANTISEPTIC SUBSTANCES IN SIZING TEXTILE THREADS.*

Of the numerous organic antiseptic substances available, carbolic, cresylic and salicylic acid alone appear to possess properties that might render them useful to the sizer. They are all obtained from coal tar. By distillation carbolic and cresylic acids are liberated as an oily fluid, and from the crude carbolic acid of commerce. If further distilled a portion of this fluid will, at ordinary atmospheric temperatures, form needle-shaped crystals; another portion will remain fluid. The former is carbolic, the latter cresylic acid. Crude carbolic acid is a dark brown liquid that emits a strong odor. It is poisonous and much

*A paper read before the N. E. Cotton Manufacturers' Association, Montreal.

*From the Textile Recorder, Manchester, England.