

architectural beauty. The custom house, erected near the beginning of the present century—long and low, with overhanging roof of red tiles—before the war enjoyed the respectable income of \$2,000,000 a year. There are several handsomely appointed club-houses here, for in Cuban cities, as in London, Paris and Madrid, club life flourishes, at the expense of domestic institutions. There is also a big building in the outskirts of the city, and cock-pits galore. A few years ago Matanzas province was the richest in Cuba, rejoicing in the possession of 478 sugar estates in operation, besides 528 stud farms, and some 3,000 other plantations of various sorts. Its rapid decadence from a luxurious center of wealth and fashion, as well as of productive industry and commerce, renders its present poverty the more pitiful. Many of the finest plantations of the old aristocracy were years ago confiscated. Others passed into the hands of Spanish adventurers and emigrants, who kept up the exhausting struggle as long as they could against a system grounded upon violation of every economic law, and the torch of war finished the rest.

I took an early drive one morning out to San Severino castle—about a month before its alleged bombardment. The way leads along the edge of the bay, through the San Carlos "Paríeo," which is laid out with graveled walks and rows of trees and stone parapet on the water side, and tall iron gates at either gate. In Matanzas's golden days this used to be the fashionable drive, thronged every evening with the beauty and aristocracy of the place, in elegant equipages, attended by cavaliers on horseback. To and fro they went, from gate to gate; until at 8 o'clock the music of the "retrata" sounded in the Plaza d'Armas, when the brilliant pageant dissolved as by magic. Now the place is deserted, except by patrolling soldiers and begging reconcentrados, and we saw no steed but one decrepit mule—maybe the same which Blanco reported as the sole victim of our guns. Beyond the Paseo, an excellent road extends two miles farther out to the forts on Punta Gorda—"Fat Point." On the hills nearest the bay are the barracks of Santa Isabella, the military hospital, and those dreadful sheds in which the dying reconcentrados are huddled, where we saw such soul-harrowing sights with the Thurston-Gallagher party, some weeks before. Then up the slopes of the Cumbre we wound, by steep and stony acclivities, to the summit of the ridge. The landscape spread out on either side, is something to live in the memory. More than thirty miles of undulating shore-line are included in the prospect, the long bay in its amphitheatre of hills looking like a majestic river, and the ocean highway dotted with sails; on one side of the ridge, the level plain, with the river running through and the city creeping up the hillside; on the other the lowly valley of the Yumuri, with its countless palms and burned cane fields and ruined homes, enveloped in a veil of mist. Like Rasselas's "happy valley," it is hemmed in by high precipices and seems cut off from the world, and ought to be the abiding place of pastoral content. But the heart is saddened on reviewing its history, from the earliest days of Spanish occupancy. Fancy sketches the scenes of carnage which marked its conquest. In 1511, when thousands of the peaceful Indians were cruelly massacred. The remnant, driven by bloodhounds to the surrounding heights were forced in despair to throw themselves down the precipices into the river below. Despairing, they cried, *Yo Muir—"I die;"* hence the name of the valley—so says tradition.

FANNIE BRIGHAM WARD.

There are now 36,000 troops at Chickamauga Park.

## MEDICAL SUPPLIES.

New Brunswick, N. J., April 1, 1898.

It is stated that medicine and surgery have made more progress in the last twenty years than the preceding twenty centuries.

It was with difficulty that permission was obtained for us to go through these great factories, situated along the Raritan canal and Neison street, New Brunswick. Mr. W. H. Ritter, the superintendent, gave his consent, and with Mr. W. H. Johnson we commenced our tour through one of the largest and best chemical laboratories and factories in the world. There are eight buildings, covering four acres of ground. There were 300 girls and women employed, and 150 men and boys, the year round. Every modern improvement is applied and utilized in their work.

As we commence in the bleaching room, our attention is turned to the immense piles of raw materials, such as cotton, cloth, gauze, etc., being boiled, cleaned and purified in great caldrons of chemically prepared solution for bleaching, and making them chemically pure. They are then dried. The cotton passes into the carding rooms and comes out in sheet-like folds wound up on large spindles a yard wide and sent to various rooms for use.

It is very interesting to observe the wonderful process of purification these articles go through before they are ready for medical purposes. For instance, in the aseptic rooms the gauze cloth and cotton are not only clean in appearance, but all bacteria is destroyed. For chemical sterilization and mechanical cleanliness are among the newer weapons that are called to the aid of the surgeon. Antisepsis has not been abandoned, but has developed into its higher form, asepsis—the anti-septic dressing has now become aseptic; and the requirements for a surgical dressing now are (1) absorb well, wound secretions; (2) be free from pathogenic organisms; (3) work antiseptically, i.e. prevent decomposition of the absorbed secretions.

These materials used by the medical profession must be absolutely free from germs of every kind—free from all forms of bacteria, and for the production of such material, we now enter the aseptic laboratories, consisting of rooms where gauze cloth, cotton and the like are prepared, by a wonderful process of chemical solutions. They are then sent to the sterilizing rooms, where provision is made for the use of steam, formaldehyde and sulphur dioxide vapors, together with chemical and mechanical processes. The principal agent employed is saturated steam. In the vacuum process as here utilized, steam, unmixed with air, passing in currents under pressure through the dressings and materials used for surgical purposes, gives the sterilization efficiency of actual boiling in water. The chambers are constructed with thick walls of metal and asbestos covered with wood. The interior is lined with perforated steam pipes for producing live steam, and radiators for producing heated air within the chamber. Doors are steam tight, pipes are fitted with supply and safety gauges, exhaust valves, etc., and iron cars, with trays, carrying the articles into the chamber to be treated. Heat is turned on, the air then exhausted until a vacuum is formed, saturated streaming steam is let in until the temperature reaches 240 degrees, and the pressure gauge indicates 5 to 10 pounds. This process is continued for about two hours and all articles then pass into aseptic rooms.

Here the walls and ceilings are glass smooth. The floors are filled and polished. There are no shelves, or crevices

to harbor dust. The furniture consists of glass-topped tables on iron frames. Everything going into this room first passes into the ante-room and is thoroughly quarantined. The attendants' clothing is changed and nothing is allowed in this "white" room but what has been rigidly and chemically purified. Herein lies the success attending the absorbent cotton, gauze cloth, and other preparations used by the surgeons. Even after this critical test has been gone through with as above described it does not seem to be sufficient; for later, bacteriological tests are made from the products of the aseptic laboratories. For example: A portion of gauze impregnated with an infected nutrient fluid. The gauze is then dried, a portion placed in sterilized nutrient jelly in the "culture chamber." If in three days a growth is found in the "check" experiment, the material is infected and all such "lots" undergo another sterilization.

Nor are materials used by surgeons the only ones manufactured here. As we go into one large "powder room," we see hundreds of hands weighing up prepared "baby powder," making and boxing corn plasters, mustar plasters, etc., for every conceivable plaster known to the medical world almost, is made here.

In the "plaster room" proper the bella donna and other plasters are run through machines and made by the hundreds and thousands, and holes are punctured in the same with the rapidity of printing. One machine alone will turn out 60,000 plasters daily, and these usually sell in drug stores from 10 to 20 cents each. Five of such machines are here.

This company has also their own printing press and advertising bureau, their own box factory, in fact every department and facility for the rapid and complete operation and carrying out of the work going on systematically and on an immense scale; for their goods are sent to Continental Europe and all over the world.

From beginning to end, from first to last, the hundreds of various products of these factories are clean and chemically pure, so Mr. Johnson says; and the order, cleanliness and discipline maintained bear every evidence of the truth.

The government has just ordered most of the supplies for the army and navy from these factories, and Johnson & Johnson are becoming very wealthy and are extending their products to all markets of the civilized world and driving out all foreign competition from the American market.

W.

## MARYLAND CONFERENCE.

The Elders of the Maryland conference over which Elder H. T. Robertson of Spanish Fork, presided, met in conference on April 20th and May 1st, at Baltimore, Md. Besides the Elders of the conference we had with us A. P. Kesler, of Brooklyn, J. H. Wilcox, N. H. Hayes and Frank Louis of Philadelphia.

The Elders met at 9 a. m., April 30th, and lost no time in carrying into effect the injunction of the president in regard to preparing and handing in reports of their respective fields of labor. After a deliberate consideration of the reports by Elder A. P. Kesler, he reported the conference to be in a prosperous and progressive condition. The Elders were commended for their untiring efforts during their ministerial career. Elder P. R. Gillespie of Tooele City, Utah, was released with honors from his labors as a missionary, in which he had been engaged for two years. Other Elders were assigned fields of labor as follows: