

schools connected with it, under the direction of M. Ouwaroff, one of the most intelligent and sensible men in the literary world. The emperor honors this faithful minister with a particular regard, and all Russia owe him gratitude for the services he has rendered her in the course of his long administration.

The school of mines is the vast and splendid institution, which has already rendered great services to Russia, and which must, in the future, render greater still. It was founded by the Empress Catherine, in 1773, and re-organized in 1834. It is now under the direction of General Schefkins, who unites to extensive acquirements an amiability of disposition which I am not the first to eulogize. This school contains three hundred and twenty pupils, divided into two sections; the first pursues the Greek and Latin courses, as in college; the second enters into the abstruse studies of the mathematical and physical sciences. Part of the pupils are maintained at the expense of the government, and others pay their own expenses. On leaving the school, the pupils are sent to the manufactories, where they must spend two years in practical studies; then they enter the service of the government, either with the grade of officers or that of superintendents, according to the aptness they have shown.

The collections of this School of Mines are magnificent; one finds there a complete assemblage of the mineral wealth of the North, of the finest productions of the Ural mountains and of Siberia; a block of emerald containing twenty-three of these precious stones, the smallest of which is an inch long; a piece of native platina weighing ten pounds, and valued at 100,000 francs; a block of malachite more than four feet in diameter, and a quantity of pearls, topazas, and diamonds.

I also saw for the first time, the entire skeleton of a mammoth, that monstrous animal beside which an elephant would seem small. When he formerly roved over the vast plains where his bones now lie buried the earth must have trembled beneath his feet.

WEARING FLANNEL.

Put it on at once; winter or summer, nothing better can be worn next the skin than a loose, red, woolen, flannel shirt; "loose," for it has room to move on the skin, thus causing a titillation which draws the blood to the surface and keeps it there; and when that is the case no one can take a cold; "red," for white flannel fulls up, mats together, and becomes tight, stiff, heavy, and impervious. Cotton wool merely absorbs the moisture from the surface, while woolen flannel conveys it from the skin and deposits it in drops on the outside of the shirt, from which the ordinary cotton shirt absorbs it, and, by its nearer exposure to the exterior air, it soon dries without injury to the body.—Having these properties red woolen flannel is worn by sailors even in the mid-summer of the hottest countries. Wear a thinner material in summer.—*Hall's Journal of Health.*

[The above is good advice, but most persons, we suppose, would prefer to wear white in preference to red flannel, were it possible to prevent it fulling up. Red flannel discharges its color by perspiration; this is an evil which does not belong to white flannel. Red flannel soon loses its bright appearance, and becomes a dull, dirty-looking crimson; this is also caused by the perspiration. White flannel, when washed, always looks clean. Old red flannel cannot be made to look clean by all the waters of Lake Huron; white flannel, therefore, has much to recommend it over red, and for under-shirts nothing else

should be worn. It can also be prevented from fulling up, as well as red flannel. What property does the latter flannel possess over the former that prevents it from fulling up by frequent washing? It is made of the same materials, consequently the cause cannot be in any difference in the quality of the wool. Red flannel, however, undergoes boiling for about an hour in the act of coloring, and this alone, we conceive, is the cause why it does not full up so readily as the white. Let white flannel be boiled in clean soft water for an hour, then dried, before it is made up into shirts, and it will be found no more liable to full (thicken) than red flannel.]

How to WASH FLANNEL.—Some washer-women possess quite a knack in washing flannels, so as to prevent it fulling. It is not the soap-suds, nor rinsing water that thicken up flannel in washing, but the rubbing of it. Cloth is fulling by being "pounced and jounced" in the stocks of the fulling-mill with soap-suds. The action of rubbing flannel on a wash board is just the same as that of the fulling mill. Flannel, therefore, should always be washed in very strong soap-suds, which will remove the dirt and grease, by squeezing, better than hard rubbing will in weak soap-suds. It should also be rinsed out of the soap in warm water, and never in cold, as the fibres of the wool do not shrink up as much in warm as in cold water, after coming out of warm soap-suds. Great care should be taken to rinse the soap completely out of the flannel. This advice will apply to the washing of blankets, the same as it does of flannel.—*Scientific American.*

MANUFACTURE OF STEEL BY ELECTRICITY.

The London *Mining Journal* contains an account of some experiments, by which in contradistinction to the ordinary method of manufacturing steel, it is proved that a process has been discovered of converting iron into steel by a current of electricity, passed through the air when placed in a furnace, and embedded in charcoal, whereby an immense saving of labor, time and fuel, is the more immediate result. The operation of the conversion of iron into steel in this manner gives a greater power of governance to the operators, inasmuch as the application of the latter for a certain time, will insure a certain amount of carbon being taken, absorbed or concentrated, and amalgamated with the iron, and thereby increasing or diminishing the action of the battery; different qualities of steel will be produced with a certainty, regularity and efficiency, which hitherto under the ordinary process of manufacture has been the object wanting—the great desideratum sought after, the end desired to be attained.

RELIGION IN AMERICAN COLLEGES.

The *Home and Foreign Record* states that in Nassau Hall, Princetown, New Jersey, there are this year 327 students, of whom 67 are professors of religion, 50 candidates for the ministry, and 28 sons of ministers. In Washington College, Virginia, there are 71 students, of whom 26 are professors of religion, and 20 studying for the ministry. Washington College, Pennsylvania, has 90 students, of whom 37 are professors, and 20 candidates for the ministry. In Davidson College, North Carolina, there are 74 students, of whom 21 are professors, and 12 candidates. In Oglethorpe University, Georgia, are 84 students, of whom 20 are professors and 11 candidates. Westminster College, Missouri, has nearly 100 students, of whom over 30 are professors, and fifteen candidates. The ratio of pious students in these institutions is greater than last year.