length. The first structure is used for converting the desired description of wood into charcoal, for which two large tubular cylinders, with furnaces beneath, are used. Contiguous to this are the wood-shed and coal storehouse, and immediately opposite are the saltpetre storehouse and refinery, where this important ingredient undergoes the process of crystalization. In the vicinity of this building, there are two other storehouses and a watchhouse, in which latter watchmen are stationed during the hours of night. We next proceed to the premises wherein the process of pulverizing is carried on. This is accomplished by placing the coarse particles of coal and brimstone in hollow iron cylinders of some eight feet in length, and about twenty inches in diameter. These cylinders are partially filled with iron balls, which, when the cylinders are set revolving, come in contact with the lumps and reduce them to a powder. From this building the material is removed to the mill—a part of the establishment to which is attached 90 per cent. of all the danger attendant on the manufacture of gunpowder. Here it is subjected to the pressure of an immense pair of iron wheels, of several tons weight,—which are made to traverse a circle. Two pairs of these wheels are in the building we allude to. In these premises the floors are laid down without nails, and the roof is tenoned and morticed, so that in the event of an explosion no impediment may be offered to its force. From the mill the powder is removed to the press-house, and subjected to the pressure of one of the most powerful hydraulic presses in British America. It is capable of giving a pressure equal to 25,000 tons.

On the powder being removed from this press it has such a striking resemblance to roofing slates, that no one unacquainted with its manufacture would recognized in it aught else. Granulation is the next process, and this is accomplished by putting the particles through a graining mill, which acts also as a bolter, and separates the fine from the coarse powder—giving *blasting* in one hopper, single F in a second, FF in a third, and FFF in a fourth hopper. After leaving this mill the powder has a greyish, dull, and unfinished appearance. To give it that nice gloss or polish so peculiar to the fine brands of powder, it requires to go through two other operations still. The first of these is drying, which Mr. Kelly effects in the same way that clothes are dried in the laundries of some of our large hotels—by the aid of iron pipes, heated by steam. In this department, with the thermometer at 125 °, and surrounded by trays full of gunpowder, our nervous system was *slightly* operated upon ; for, although aware that the intense heat was caused by steam, we could not help thinking that there might be some truth in the remark of a Hibernian, "Where there's smoke, begor there must be fire!" The finishing touch is given to this dangerous commodity in another apartment, called the cracking and glazing room—where it is placed in the interior of four hollow wooden cylinders, which revolve with considerable velocity, giving the desired lustre and finish.

The powder having now gone through the various stages of manufacture, is removed to the packing rooms, where it is put up in kegs and canisters of various sizes, and the different qualities designated by appropriate labels.

In this way can be manufactured at the Canada Powder Company's mills, 160 kegs of blasting powder per day, or 80 kegs per day of the finer qualities.

The reader will at once imagine that a large staff of coopers will be necessary to furnish kegs for so large a quantity. No coopers are required, how-