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in many branches. The markets are insufficient to supply its wants so suddenly created, and it must build, delve, forge, construct and transport on its

Bureau relate to subjects wholly foreign to its proper sphere. His office is no sinecure, nor is his chair an easy chair, in any sense. In the United States service such a functionary sits at his table and orders from contractors and in the markets all he needs, and is praised for his energy and accomplished efficiency in doing this. So

and committed for success, if he does this. See what our Chief of Ordnance, for example, and his officers, find themselves obliged to do: They lease or purchase timber lands, and place saw mills thereon to get timber and lumber; if bricks are

kilns; they purchase hides all over the country, glad to get them, and become tanners. They boil their own meats for oil, establish fisheries and turn

sturgeon into oil for mechanical uses. They go to the mountains and quarry grindstones for their wheels and armories, and have some to spare for the market. And so on, to supply their countless wants. Nay, they have to go a step further, and supply food and clothing—sometimes shelter—to the operatives, white and black, by whom they are served, and too often even to the families of their operatives. All work for the common good, and look to the Government for sustenance. All this requires freecast and incessant thought.

Reverting to the subject of machinery, and its progress, the manufacture of percussion caps is an instructive instance of the advance of arts and manufactures in the military service. No machinery was made in the South, nor was the art of making the fulminate of mercury to fire the cap practised. The Ordnance Department of the State of Virginia, under the direction of its late capelle chief—peace to his ashes—offered a reward for a machine for forming the cap, and one was in operation about the 1st of June, 1861. The caps made were rude enough and the product small. Since that day, such has been the progress, that 400,000 have often been produced in the Confederacy in a day; and there are machines enough to make a million, if needed. The caps compare favorably with those made in the United States, and are better and more reliable than the imported English musket cap. All the operation, down to varnishing the cap, are performed by machinery. The whole number made and issued during the war, has reached 150,000,000, consuming over 200,000 pounds of copper; 6,300 pounds of mercury; 50,000 pounds of nitric acid, (made at home chiefly,) and 60,000 pounds of alcohol. When it is considered that the machinery produced by the United States, at the beginning of the war, could not equal the quantity required to produce this amount of caps, and that that machinery was some fifteen years in attaining its then perfection, the mechanics of the Confederacy have excellent something to boast of.

Excellent machines for drawing friction primers for cannon and for pressing lead balls of the various calibres have been designed and successfully

executed in several parts of the Confederacy. The machine used in connection with the Richmond laboratory is ingenious, and the results very satis-

factory. At the same laboratory are a half dozen highly finished machines for driving time forges, invented and constructed here.

To sum up the labor of this department—it has established

- 7 First Class Arsenal;
- 5 Second Class Arsenal;
- 1 Large Harness Shop;
- 2 Armories of its own;
- 2 Armories through Contractors;
- 4 Powder Mills, (two through Contractors);
- 1 Laboratory for smelting lead, (now in charge of and extended by the Nitre and Mining Bureau), and various smaller depots and works.

At each of these first-class arsenals are fabricated all the material of an army, from a gun-carriage to a linstock or a horse shoe nail. Wood work, iron work, tin work and work in copper and brass all go on together. Each has its extended carpenter's shop, with its endless machinery for sawing, turning, loring and planing wood; its machine shop for drilling, milling and peering iron in all its shapes; its blacksmith shop, of twenty to fifty fires, with its cranes, and hammers, and anvils; its harness shop, where saddles, harness, carriage boxes, cap pouches, belts and all products of leather are made; its tinsmith, its brass furnace, its cooper, and its shoemaker. The full of raw material and finished products ready to go to the army.

To the armies of the Confederacy, it has supplied, East and West of the Mississippi, over half a million of small arms, quite 200 well equipped batteries, countless small-arm carriages, hundreds of thousands of accoutrements for cavalry. All this is but a feeble exhibit of what has been done in one department, and speaks well for the energy with which the resources of the country have been ap-

plied in this struggle. It should go far to make us hopeful for the future. A country that has developed such things in such a contest exhibits

vitality which will sustain it throughout the struggle, however protracted.

Molasses the best Substitute for Coffee.—A lady at Morganton, N. C., writes us as follows: "Molasses is the best substitute for coffee. Try it, and you will never use *Rye* again. Thus: Take one pint of Molasses and boil it until it looks black and tastes bitter. All the sweet taste of the Molasses must be taken from it. If you taste the Molasses in the coffee it is because it has not been burnt enough. After it is burnt sufficiently throw into it two pints of water—mix it well and bottle it. To every six cups of coffee, take one table spoonful of pure coffee and two spoonfuls of the liquid. Boil very little. If the coffee is desired stronger, put in less than six cups of water.—*Subsidiary Watchman*."

CHINESE WORSHIP.—A Chinese Jossanoh, or temple for heathen worship, was dedicated in San Francisco on the 23d of August. It cost eighty thousand dollars. A band of tapestry, embroidered with feathers and gold and silver thread, which adorns the place, cost one hundred and fifty dollars per yard, and the whole building blazes with gold leaf and tinsel. The priests shout, screech, yell, groan, spin round amid the racket of gongs, drums and fiddles, and smoke opium until they are quite drunk, when others relieve them. The finger nails of the chief priest are usually longer than his fingers, and are twisted like an awl.