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Purifying Rancid Butter.

Calvin Peck some ten years ago obtained a patent for restoring and preserving butter; his invention relates to a new process for purifying butter, having especial reference to arresting fermentation and restoring rancid butter. His process consists in melting the butter in a clean vessel under a slow and regular heat, and while it is melting he adds two ounces of pulverized alum to every five pounds of butter, the butter being stirred gently while melting. When thoroughly melted it is strained through a fine strainer into clean cold water. The butter will rise to the surface quite pure and transparent. The alum coagulates the albumen, the caseine, and other foreign matter, all of which are retained in the strainer, leaving the butter perfectly pure and clean, and of uniform consistency.

When the butter is sufficiently cool to be in good working order, it is carefully taken out and thoroughly worked, adding to each five pounds of butter three ounces of good dairy salt, one ounce of clean saltpeter, and one ounce of pulverized white sugar. The butter is then packed in clean vessels, and is fit for use.

By covering it with strong brine and keeping it in a cool place, it is claimed it will remain sweet for any desired length of time.

Apropos to the above a correspondent in *Land and Water* answers an inquirer in its columns who wants to know how to sweeten rancid butter, as follows: If her butter is very bad, premises the writer, I cannot promise that the following plan will entirely restore it; but I can at least describe a process which I once watched at an agricultural show, where a machine for washing butter was at work and where some very horribly odorous butter was in a few minutes rendered edible. It did its work very quickly and by the simple turning of a handle, and the same sort of process might be accomplished by means of a wire sieve or a strainer anywhere. The butter was forced through a finely perforated receptacle into a large tub of fresh cold water. It came rapidly raining down in a fine capilliform shower, lying upon the clear water in a tangle of golden filaments, singularly beautiful, till the water was all covered with them. When the whole lump had been thus transformed into yellow threads, they were stirred and beaten about in the water with a wooden beater; then collected and pressed into a fresh lump of greatly improved appearance, and again forced through the machine in another shower of delicate filaments. This process was repeated several times, till the butter had been washed literally through and through.

Shoeing Horses.

The Rev. W. H. H. Murray, whose advice is worth heeding, says about shoeing: The nails should be quite small and driven in more gently than is the custom. There is no reason why the smith should strike a blow at the little nail head as strong as he would deliver at the head of a spike in an oak beam. The hoof of the horse is not an oak stick, and the delicately pointed and slender headed nail is not a wrought iron spike, and yet you will see the nailer whack away at them as if it was a matter of life and death to get them entirely set in at two blows of his hammer. Insist that the nailer shall drive his nails slowly and steadily, instead of using violence. In this case, if his nail is badly pointed and gets out of proper line of direction, no great injury is done. It can be withdrawn and a new one substituted, without harm having been done the foot. But the swift, blind, and violent way prevents all such care, and exposes the horse to temporary, if not permanent injury. Gentleness should be exercised in clinching the nails. Never allow a smith to touch a rasp to the outer surface of the hoof. Nature has covered it with a thin filament of enamel, the object of which is to protect the inner membrane and fiber from exposure to water and atmosphere. The enamel is exactly what nature puts on the surface of your finger nail, reader. Under no circumstance should it ever be touched. If it is removed nature will be wickedly deprived of her needed covering, and cruelly left exposed to the elements.

AMERICAN INDUSTRIES, NO. 13.

THE MANUFACTURE OF WIRE.

Wire rope has become an important article in almost every branch of industry, and its uses are constantly multiplying. Strength for strength, it is now cheaper than the manila or ordinary hemp cordage used for hoisting or rigging purposes, and when used as a substitute for belting or shafting in conveying power long distances, the cost is trifling when compared with them. The use of galvanized ship rigging is rapidly increasing, and a majority of all vessels which have been built within the last ten years have been fitted throughout with wire standing rigging. Its elasticity is about the same as that of hemp, while its lasting qualities are equal to that of the ship it is used on. In our present issue we give a brief description of the methods followed at

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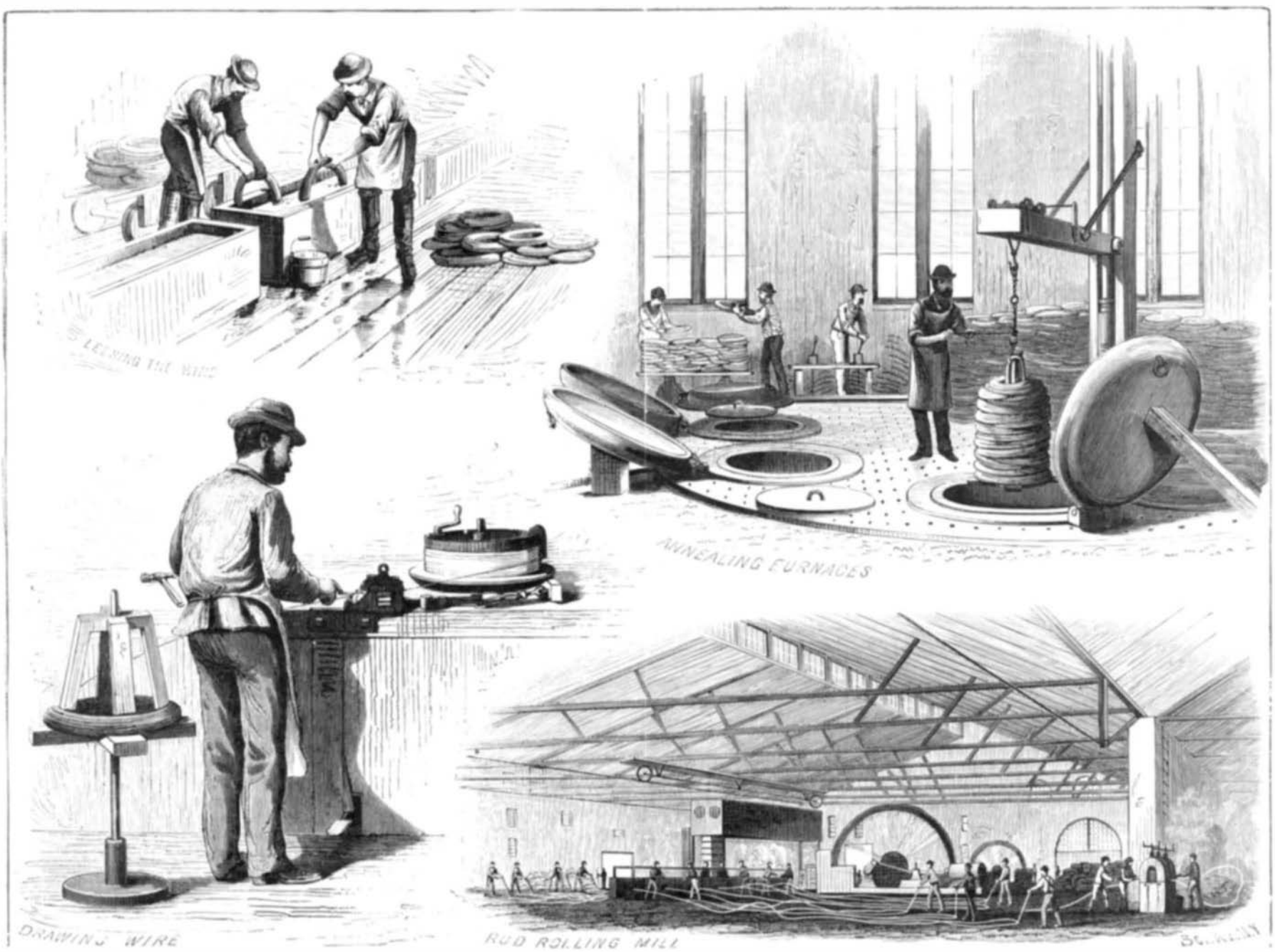

Fig. 1.—THE MANUFACTURE OF WIRE.