

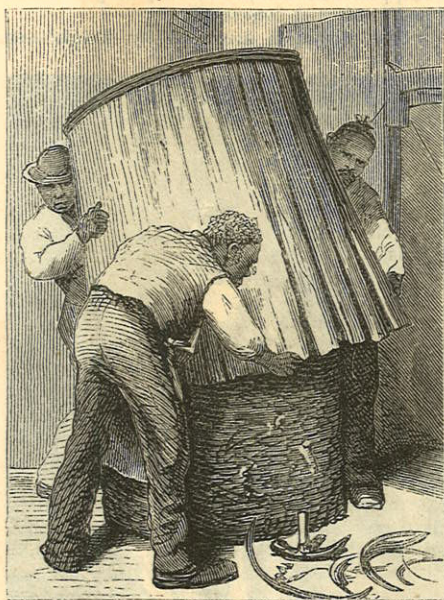
succeeded in placing his captain on a plank, and by swimming alongside endeavored to get him safely to land. Encountering a raft on which some of the crew had sought refuge, the captain thought he would be safer with them. He left the plank, and succeeded in reaching the larger support. Caret plunged to avoid collision, and on rising to the surface again was horror-struck to find that the raft with all on board had been engulfed.

On board the *St. Geran* were two lovers, Mlle. Mallet and M. De Péraron, who were to be united in marriage on reaching the island. The young man, as anxious and agitated as the girl was calm and resigned, when the others left, was making a sort of raft on which to save her who was dearer than his own life. On his knees he implored her to descend with him on to the frail but sole hope of safety; and to insure a greater certainty, he begged her to take off the heavier part of her garments. This she steadily refused to do. When he found his most earnest solicitations vain, and all hope of saving her lost, though she entreated him to leave her, he quietly took from a pocket-book

a tress of her hair, kissed it, and placed it on his heart. With his arm round her to shield her as far as he could to the last, he calmly awaited the terrible catastrophe at her side. Nor had they long to wait, for they were soon washed from the deck. Their bodies were picked up the following day, clasped in the close embrace in which they awaited death.

This touching incident formed the groundwork of the beautiful story over which so many tears have fallen. Mauritius was then but little known, and St. Pierre's pictures of its life and scenery were all drawn from imagination; but the story has invested the far-off island with an atmosphere of romance. Two structures at Pamplemousses known as the tombs of Paul and Virginia are still shown to visitors—two dilapidated piles of brick, still betraying traces of whitewash on their crumbling sides. When visited by Mr. Pike, who had been asked by a romantic young lady to gather for her some flowers from the tombs, he found the surrounding grounds converted into an impassable swamp by recent rains. Romance is evidently at a discount in Mauritius.

## IN A TOBACCO FACTORY.



BREAKING.

**T**HERE is no department of industry more carefully guarded from intrusion than a tobacco factory, none where visitors are more in the way; and it was therefore by special courtesy that, one bright morning last Octo-

ber, we found ourselves in the office of one of the largest factories in Richmond, Virginia, with the polite proprietor ready to show us through the establishment.

On the first floor we were introduced to the steam-engine, the motive power of the whole concern, which does double duty in also heating the building, so that, unlike the planter, who is entirely dependent on times and seasons, the manufacturer regulates his own climate, and asks no odds of the weather.

All tobacco brought to the Richmond market is sold by sample. These samples, each ticketed and marked with the name of the planter by whom the crop of which it forms part was grown, the weight of the hogshead net and gross, the name of the commission merchant who sold it, the warehouse where it was inspected, and the price per hundred paid by the manufacturer, tell the whole history of the tobacco. Thus, in case of accidental or intentional fraud, it is easy to affix the blame where it lies, for should the contents of a hogshead vary in the least from the sample, the manufacturer can at once refer to the party from whom it was purchased.

Should buyer and seller fail in such case to come to an agreement, the matter under dispute is decided by a committee of arbitration, composed of three members of the Board of Trade.





SORTING.

Once at the factory, a steam-elevator raises the hogsheads to the stemming-room, in the upper story; and here, in a close little compartment, partitioned off, and rendered as nearly air-tight as possible, the tobacco is exposed to what the manufacturers term "live steam"—i. e., a steam bath—until it becomes in order for stemming. It is then taken out and placed in bulk, being carefully covered with blankets to keep the steam in until it is distributed to the stemmers.

These operatives, who are usually women or children, take the leaves, which have under the foregoing process become as soft and pliant as the finest kid, strip them of the midrib, or "stem," and tie them in bundles, with a stem for the band.

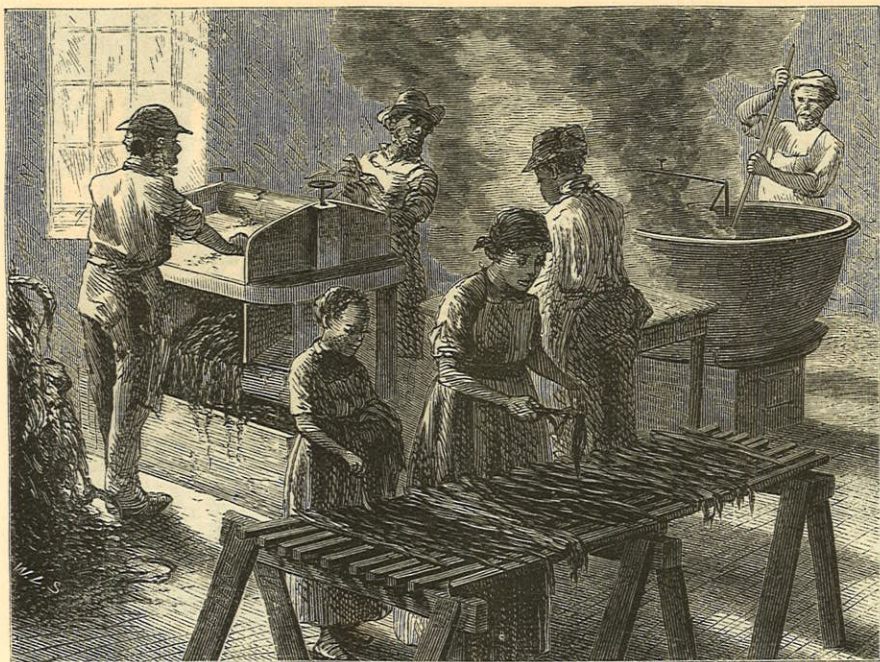
The choicest of these stems, not used for this purpose, are packed in hogsheads and shipped to Bremen, where they are pulverized and converted into snuff.

The stemmers are paid by weight—so



STEMMING.





BOILING LICORICE AND DIPPING.

much per pound for the tobacco they stem; and the superintendent of the stemming-room, with scrupulous exactness, keeps tally of every parcel as it is placed in his scales, and credits the stemmer therewith on the slate which lies on his desk for the purpose.

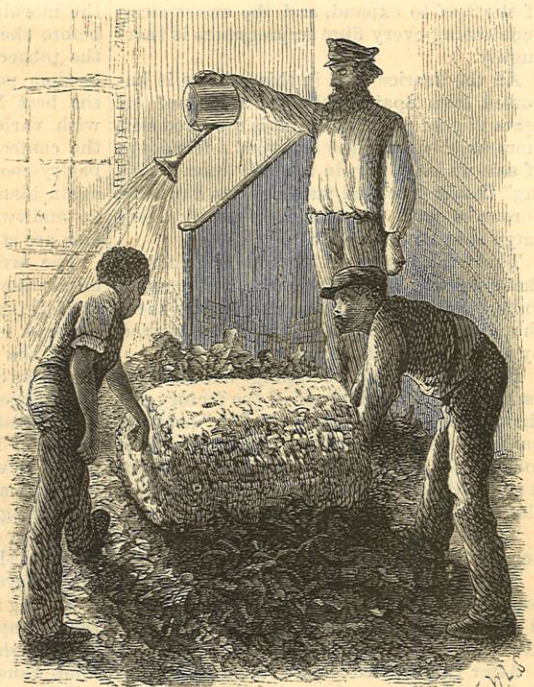
The bundles of stemmed leaves are now strung on sticks and hung in the drying-room until they become perfectly dry, when they are ready for the application of the mixture of sirup and licorice which imparts to the chewing tobacco of commerce its sweetness and flavor.

By the side of the huge kettles in which this mixture is prepared men stand all day long stirring it with wooden paddles to prevent its burning.

In the factory which we visited 200 gallons of sugar-house sirup are daily used, and this, cooked to a candy, is mixed with Spanish licorice, which has previously been dissolved.

As soon as this concoction attains the right consistency it is poured, boiling hot, into a large trough, and into this steaming fluid the tobacco is dipped as fast as it is brought from the drying-room. The leaves must be *bone*

*dry* when subjected to the licorice bath, for the least dampness will render them white with mould in a few hours—as hopelessly



SPRINKLING THE FLAVORING.





TWIST-ROOM.

ruined as the growing plant on which a black frost has fallen.

The heat of the mixture causes the pores of the leaf to expand, and the sweet sirup penetrating every fibre impregnates it thoroughly.

All the licorice used in this process is imported from Spain, and pays a duty of ten cents in gold per pound. It is rendered still more expensive by the fact that a few drops of salt-water will ruin a whole case, "killing" the licorice, and making it as hard and porous as cork. A portion of nearly every cargo is lost in this way.

The "clippings"—as the odds and ends of the tobacco leaves are termed—are too small to be dipped with the bundles, and to them the mixture of sirup and licorice is applied by means of a watering-pot.

From the vat the dripping bundles are carried out on the flat roof of the factory and there exposed to the sun. "For," said our guide, "one day's sunshine is worth more to tobacco than any thing else we can do for it; it gives it a sweetness which nothing else will."

"How do you protect it in case of a sudden shower?" asked one of our party.

"Protect it!" was the reply. "If a shower comes up we order out all hands, and hustle it in through that door in about two minutes."

After this the leaves are taken into a second drying-room, where the thermometer

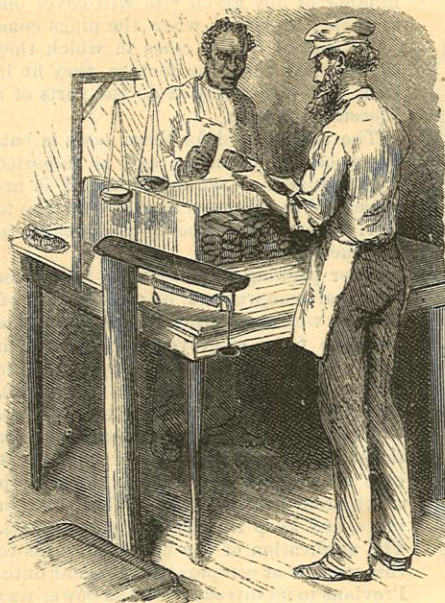
during the day is kept at ninety degrees. At night the whole power of the furnace is turned on, and the heat is so intense that in the morning the room has to be cooled off before the operatives can enter it. When the tobacco has, under this powerful heat, become perfectly dry, it is sprinkled with the best New England rum, and flavored with various essential oils as carefully as the confectioner seasons his candies or the pastry-cook his pies, and thus prepared, and again blanketed, it is ready for the "lumpers and twisters," as the next class of workmen are styled.

The arrangement of the twist-room reminds the unmechanically instructed visitor strikingly of a school-room. At the upper end is the superintendent's desk, and down the long room, in parallel rows like the desks of the scholars, are ranged the tall work-benches of the operatives. Each man is supplied with a gauge for regulating the length of his lump, and a scale in which to verify its weight, that it may fit exactly into the shapes when taken to the press-room.

Nothing goes by guess in a tobacco factory; every thing is done by rule and measure, and these rules and measures are themselves carefully tested.

Taking a handful of the medicated leaves, the "lumper," with nimble fingers, rapidly moulds them into shape, and around the lump thus formed he wraps a virgin leaf, which, still in the state in which it left the





EXAMINING WORK.

plantation, has undergone neither the licorice bath nor flavoring process. This is used for the outside wrapper in order to prevent sticking to the machinery, licorice and sirup being notoriously adhesive. As fast as the lumps are made the lumper slips them into his gauge, cutting off the superfluous length with an instrument somewhat resembling a tiny guillotine, weighs them in his scale, adding or removing filling as they fall short of or exceed the required weight, and when correct, places them in the receptacle provided for that purpose on the bench in front of him. Every lumper has for assistant a boy, whose principal duty it is to stem and hand him the leaves for his outside wrappers, and who waits on him exclusively.

The lumpers engage and pay these boys themselves from one to two dollars per week—their own earnings, if they be experts in their trade, varying from twelve to fifteen dollars for the same time. They, like the stemmers, are paid by weight, the price varying in ratio to the number of lumps required to make a pound—those who work in “pocket pieces” of two ounces each gaining the highest, and the makers of “pounds” the lowest wages in proportion to

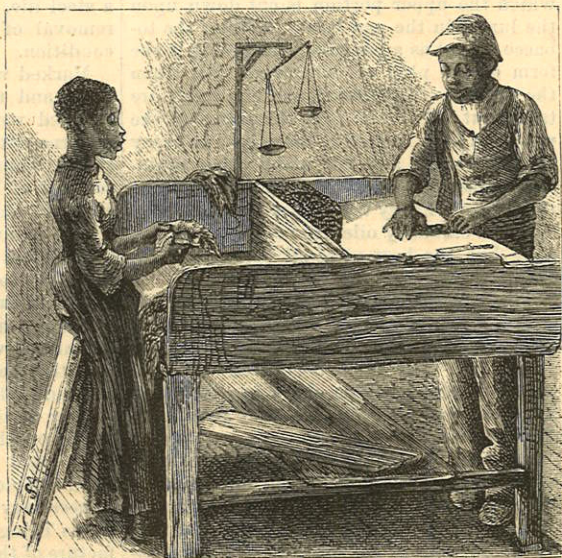
the aggregate weight of their work. In regular rotation the lumpers take their work to the superintendent of the twist-room for inspection. He weighs every lump separately, rejecting all which vary, be it never so little, from the standard. Those which have been found correct are then weighed a second time collectively, and the operative is credited on the superintendent's slate with the amount. The defective lumps must be remade until they conform to the standard. As one operative leaves the superintendent's desk the next in turn comes up, keeping that functionary busy all day long.

“How do they fix them when they are not heavy enough?” asked one of the visitors. “Do you let them wrap another leaf round the outside?”

“Not if we can help it,” answered the proprietor; “but they do it sometimes in spite of us. John” (to the hand whose work was then undergoing inspection), “tell the lady how you make your lumps heavy enough when they are too light.”

“Put mo’ fillin’ in,” grunted John; while a twinkle in his eye showed his appreciation of the conversation, and full acquaintance with the sharp practice referred to.

Every operative in the twist-room is furnished with a case, in which he or his assistant packs the lumps as fast as they are inspected; and when these boxes are filled to their utmost capacity they are taken to the press-room. Here the lumps are fitted into the “shapes,” large shallow pans of sheet-iron, subdivided into compartments, into which the rolls of tobacco fit with the



MAKING NEGRO-HEAD.





OPENING FINISHING POT.

greatest exactness. Each shape has a thick wooden cover faced with sheet-iron, and intersected by grooves, into which fit the strips of iron forming the subdivisions in the shape below. These shapes when filled are placed in one of the hydraulic presses which extend in a long line from one end of the room to the other, and are subjected to a force of three hundred and twenty-five tons, which brings the two parts of the shape together, and drives the blocks into which the upper portion is cut down upon the lumps in the pan below, making the tobacco as flat as a pancake, and giving it the form of the plug of commerce. But when the pressure is removed, and the cakes are taken out, it is found that the side next the wood is a little ragged at the edges; so every piece is turned and put under press again, that these edges may be made as smooth as the others. Every time the moulds are used they are carefully oiled to prevent sticking, none but the best olive-oil being used for this purpose.

This process over, the plugs are taken to a second row of presses, where, after having been fitted together on sheets of tin as precisely as a lady joins her patchwork, and placed so that between every two sheets of tobacco comes a sheet of tin, they are a third time pressed.

And now the cause of all the great precision taken heretofore in the measurement of lumps and shapes becomes apparent. These tins are exactly the shape and size of the bottoms of the cases in which the tobacco is put up for market, and a given

number of any given size will cover one of them; therefore, when the plugs come to be packed in the cases in which they are shipped from the factory, they fit in their places as nicely as do the parts of a Florentine mosaic.

The timber used for these cases is but-ton-wood, or sycamore, and is imported from Canada. Vast quantities of it are consumed in this way, from twenty-five to thirty thousand feet being used weekly in this factory alone.

After packing, the cases are placed for the final compressure in a third row of presses, where, for protection against the immense force employed (a force which would else bend the cases outward in the middle and crush them into fragments), they are fitted into what are termed billies.

A billy consists of a case formed of four thick pieces of wood, turned with great care in a lathe, and bound about with stout iron bands, which hold them in place, and keep the packing cases intact. The application of the hydraulic press to this work is of comparatively recent date. Previous to its introduction the power was obtained by means of the old-fashioned screw-press, at much greater expense and with less satisfactory results than by the present method.

Each case is grooved for the insertion of the revenue stamp, a precaution necessary to prevent the abrasion thereof; and the government guards against a second use of the same stamp by requiring the manufacturer to sink the heads on the stamp (which are surrounded for this purpose by a line of perforations similar to those on a card of postage stamps) into the wood by means of a steel die, thus effectually preventing the removal of the stamp in an unmutilated condition.

Marked with the name of the manufacturer and the brand of tobacco, and duly fortified with the revenue stamp—for the government still lays a heavy hand on this staple, though the taxes have been much reduced of late—the work is done, and the cases are ready for shipment.

The manufacture of smoking tobacco is a much less intricate and troublesome process. The tobacco as it comes from the plantation is dried to the utmost, and passed through a mill in which a revolving cylinder armed with small projections grates it into tiny particles. It is then by the same machine sifted through a series of sieves similar to those of a wheat fan, that which is left on the upper and coarser sieves being passed and repassed through the mill until sufficiently fine for use. For this it is unnecessary to stem the leaves, the refuse stems being themselves used in the manufacture of the inferior grades, and the sweepings of the stemming-room are devoted to a



like purpose. These last are first carefully examined, to make sure that nothing is left in them to break the mill, no nails or stones to injure the machinery. A man on his hands and knees was picking over a pile of sweepings the day we visited the factory, seeming as intent on his task as the searcher for pearls in the oyster pits of Ceylon.

The inferior grades of lugs, etc., can be used only for smoking. Indeed, no leaf is worthless for the manufacture of one or another of the innumerable brands somewhere between the golden chaff with which the millionaire fills his costly meerschaum and the black mixture which Paddy smokes in his clay pipe as he drives his dray—there is place and use for it all.

Smoking tobacco is generally put up in bags holding from two ounces to one pound each, a pound being the limit allowed by government for any single package. The packing is done by means of hollow iron cylinders, over which the bags fit closely and are tightly drawn. Into these the tobacco is poured, and by working a treadle a wooden mallet is forced into the cylinder, compressing the mass into the smallest possible compass. This operation is repeated until the bags are full, when the cylinders are withdrawn, leaving the closely packed tobacco in the bag.

The number of bags required for this business may be imagined from the fact that in the single factory visited by the writer their manufacture furnishes a support for fifteen poor families, besides which a large number are made by persons who merely do the work as a source of pocket-money. The manufacture of tobacco is the principal industry of Richmond, outstripping even iron in the revenue which it produces. The largest income listed last year in the State of Virginia was that of a Richmond tobaccoist, and what the Bourse is



THE OLDEST AND THE YOUNGEST HAND.

to Paris, the Stock Exchange to New York, that the Tobacco Exchange is to Richmond.

Physicians and moralists may prescribe and lecture against the use of the weed, but in vain, for all over the world, ever since Newton's pipe drove his servant-maid into hysterics, when, coming upon him unawares, she thought his head on fire, and Johnson's snuff-besprinkled ruffles disgusted his lady friends, its consumption has been steadily increasing, and among all nations it is now the favorite nerve stimulant.

"Much meat doth gluttony procure,  
To feed men fat as swine,  
But he's a frugal man indeed  
Who on a leaf can dine.  
He needs no napkin for his hands,  
His fingers' ends to wipe,  
Who has his kitchen in a box,  
His roast meat in a pipe."

## LOTTERY.

By JULIAN HAWTHORNE.

A SOBER life, far-lit with promised joy;  
A jovial life, yet scenting distant ill.  
The promised joy, the dreaded ill, draw nigh;  
The sober life loses its grave alloy,  
Its fortunate fate full trusting to fulfill.  
The darkening dread of dismal destiny  
In riftless shadows wraps the outcast Jollity.  
Now strikes the hour! each draws, and holds, his breath.  
Behold! the rainbow hope is snatched away:  
A thunder-bolt strikes Joy's fond aspirant dead;  
But breaks his chains who had looked forward to death.  
So shifts Life's lottery from day to day.  
Yet Justice governs all: who lives in dread  
Of nothing mates with who on phantom joys is fed.