

TERMS OF PUBLICATION.

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TERMS INVARIABLE CASH.

fore morning. All along the coast and on every eminence commanding a view of the vessels, were collected little companies of speculative watchers. On the east side of the river, were gathered ten or twelve men, noting every motion that was visible and listening to every sound that came from the water.

"Is it not possible to know what is the object of those water coffins?" said an old gentleman, while he strained his eyes as the darkness drew deeper.

"It might be done," said a young man whose face had been bronzed by familiarity with the ocean. "It is nearly dark enough. Come, Bill, what say you? There won't be so much light as comes from a cat's eye in an hour; shall we take a boat there and slip alongside?" Bill, as a stout fellow of thirty was called, could not permit that a younger man than himself should propose a deed he would shrink from executing, immediately signified his willingness to join in the almost reckless enterprise.

The night was cloudy, the darkness had settled thick and heavy, the waves looked like a black, undulating pall, and as though to increase the awfulness of their condition, the British had extinguished their lights. Soon after the adventures had launched their boats, an object could be traced, in the almost palpable blackness, the boat's length distant. They rowed in silence for some time, and had gone two-thirds of the distance before either spoke. "Are you sure this is the right course, Ned?" at length said Bill, as they rested on their oars.

"Hush, speak lower. No, I am not certain, but we cannot be far from them. If but one star would look out it would be better than this eternal gloom. I cannot see the lights on shore through this fog. What a murky night we are out in! Gloomy as a grave-yard!" "Hang the British, I had rather meet a legion of them by daylight," whispered Bill, moodily.

"But hark! there they lay, dead ahead, and getting ready to make a port, too," he continued, as he heard the low grating of a cable, as it was slowly and cautiously drawn up.

Lightly as the swallow's wing the oars dipped into the brine, silently as a shark the boat cut the water, and, directed by the sound, ere the anchor swung at the bow they glided unseen under the very stern of the large vessel. But the humming voices, out of which nothing distinct could be gathered, was mingled with the winds sighing through the rigging, and the dashing of the dashing of the waves against the huge fabric.

With their patience nearly worn out, Ned at length whispered: "Bill, if you can keep your hold I will go aboard and get a full report of these villains' business." The latter was about to reply when they heard hurried motions on the deck; a large boat was let down, and a dozen men, all of whom by the faint light of a lantern they discovered to be armed, pushed off toward the shore that lies south of the Piscataqua.

Scarcely had they gone when Ned, with the assistance of a rope that dragged into the water, climbed to the deck. The watch was grouped beside a gun carriage, and Ned, as confidently as though he had been one of the crew, walked by, and reaching the hatchway, descended to the lower deck. Here he found himself among several hundred men, a part of whom were in their hammocks, but others, although it was a dungeon, appeared to be arranging their clothes and preparing for some desperate enterprise.

Almost lost in confusion, he stood motionless at the bottom of the steps; but he had been there but a moment when, hearing some one approaching, he stepped aside hastily, and not knowing where he might be, held out his hands to grope his way. As chance would have it, he went directly toward the head of a sailor who was trying to catch an hour's sleep before his night's work should commence. Ned, quickening his pace as the step came nearer, suddenly plunged his fingers into the locks of the sleeper, and with such force that his head received in no considerable wrench. The old tar leapt to his feet in a twinkling, and Ned darted off like a chicken chased by a hawk, leaving the angry sailor daring the whole ship's company to try to take his scalp off.

He soon learned that it was the intention to make an attempt to effect an entrance to the harbor that night, and the boat he had seen leave the ship was gone to examine the chains which had been thrown across the main channel, and if possible saw them. This was all he could learn. It was enough, and he felt there was urgent necessity of giving instant warning of the danger. But when he reached the hatchway he found the passage entirely closed by two old veterans half intoxicated, who had settled themselves to have a quiet time in landing old England and cursing the Yankees. Ned stood there, almost invisible, but necessarily hearing every word. It was nearly an hour that he stood waiting for them to rise and listen to their outbreaks of passion concerning the Americans.

"Their men are no bolder than our women, and their guns are no better than tin horns," said one gruffly. "No, Jack," said the other, "and do you know that once on a time about twenty of our gals on the coast of Cornwall, dressed like sailors, put off in a gun-boat and took a Yankee seventy-four with no other arms than old swords?" Ned, boiling with rage, could not hear such slander, and regardless of consequences, roared out, "That's a lie, you old dog!" Both sailors shook as though the magazine had exploded, plunged toward him, and awakened to a sense of his situation by his own voice, Ned sprang out of their reach, and, as soon as the uproar had in some degree subsided, made his way on deck—but here an unexpected event occurred. The boat which had just returned, and the crew, which he stepped on deck, where in the act of lifting up a prisoner. Determined, if possible, to know who he was, he elbowed his way with admirable coolness, and succeeded in taking the arm of the prisoner. While notice of their success was passed below, Ned found an opportunity to whisper a word of encouragement in the poor fellow's ear, and when the orders were given that he should be conducted to the cabin, Ned stole aft and dropped into the boat. The prisoner found the cabin furnished in an elegant and even sumptuous style. Sofas, bookcases, and tables of the costliest wood, rested on a carpet that trod like vel-

vet. Mirrors, of enormous dimensions, reflected the occupants at full length on every side. A lamp hung above a rack that looked like a dazzling pyramid, so rich were the hilts, the silver scabbards, the jewelled pistols, the steel sabers and the guns, touched with the highest finish that skill could give them. Flower vases, filled with beautiful exotics, were fastened to a stand, diffusing an agreeable odor through the cabin. An old man, with snow-white hair and thoughtful brow, sat in an antique chair of carved oak, fashioned after such a luxurious pattern that one might have longed his life out in it, and never grow weary. A girl, the daughter of the old man, with such a sweet countenance as can only belong to a pure mind, and with lips as tempting as her own rose-buds, was reading when he entered. The prisoner was brought before the hard-featured veteran, and the officers arranged themselves about a respectful distance.

"Young man," said the old commander, with a severe frown and penetrating look, "remember it is the truth of what you shall say on which your life depends; any attempt at deception in my presence will cause you to be hung immediately to the yard-arm. Who are you?"

"A soldier of the American army."

"And what duty were you performing on shore?"

"That of sentinel, to watch for the approach of the murdering British."

"Bridle your insolence, young man; you did not perform your duty so well that you can boast of your occupation?"

"Ask your servant which was the hardest, his head or my gun-stock. I could not dissolve the night, but I swept away the cobwebs that clouded the stars before his eyes."

"Sir," said the veteran, in a voice hoarse with anger, which he strove to conceal, "what is the force assembled this night in Portsmouth, and if you deceive me you shall die at day-break."

"This morning it was proclaimed that it numbered thirty thousand, and they have five hundred cannon in town, ready to blow your old hulks out of the water, like cockle shells, if you are so fortunate as to float after the forts have the sifting of you."

The old commander clenched his fist, his face grew white as his cravat, and he would have ordered the fearless soldier to instant punishment for his bold reply had not his daughter, who had stolen to his side, pressed her arm, and breaking into tears, whispered mercy. An angel's tears will melt iron, or at all events an iron soul, and his countenance lost its sternness as he gently put her aside, directed that the soldier should be secured and guarded on deck for the night.

As he left the cabin, the girl, unseen by her father, threw her arms about the soldier's shoulders, and he, touched by such unlooked-for kindness, murmured a fervent blessing on her young heart.

The night grew darker as the minutes glided by. The mist was so dense that it was impossible to distinguish even the outlines of an object six feet distant, and it seemed as if the clouds rested on the waves and enveloped the ship.

The hands and feet of the prisoner were then ironed, and he was lashed by a rope to a gun carriage. The watch that was set over him walked the length of the deck, momentarily passing and repassing, thus rendered escape by his unaided efforts impossible. Ned, having again climbed on board, had observed them fasten the prisoner, and waited a fit time to spring and rescue him; and it was when the sentinel passed him to go to the bow that he glided to the prisoner—with a thrust with a knife he severed the cords that bound him to the gun, lifting him in his arms as though he was an infant, hastened to the stern and swung him into the boat. As for life, they plied their oars, but they had scarcely left the ship when they heard the alarm given upon deck. Calls for lights, and shouts that the prisoner had escaped, followed. Lanterns flew through the ship, and all was confusion. The bold fellows in the boat saw all, and felt in that deep darkness that it was impossible for the British to overtake them; and, although within a pistol shot, they were unable to restrain their joy, but, with that fearlessness that characterizes American soldiers, rested on their oars and gave three hearty cheers. Scarcely had the last hurrah left their lips when a stream of fire shot out from the ship, and the deep boom of the cannon awakened them to their folly. Though fired at random, they heard the ball whistle by very near them. The boatswain's shrill call to quarters rose on the night, and the sailors, expecting an attack every moment rushed to defend the deck.

Our heroes reached the shore safely, and the sentinel, released of his shackles, was ready to resume his arms and his duty. The night passed heavily and in suspense, and the sun rose from its bed looking cold as an icicle. The sea was blue but calm, and every ship was gone, and not a speck dotted it from the shore to the horizon. The British had given over all attempts on Portsmouth, but whether refrained by the crafty story of the sentinel, the valiant cheering of the men in the boat, will perhaps ever be a point in dispute.

THE WAR OF 1812.

One day during the last war, opposite the Portsmouth harbor and about three miles from the shore, lay a black frigate at anchor, and the continual motion on its deck, as seen with the aid of a glass from the land, betokened that some event of unusual interest was soon to occur. Although it showed no colors, it required an eye of but little experience in naval matters to decide that it was English. What could be its object was a mystery. Its wooden walls of actually concealed it from the shore, and when, during the day, it was joined by another vessel of the same class, and a heavy man-of-war, not a little excitement was created among those who lived near the shore.

Toward Portsmouth the enemy had often sent long glances. It was the key to New Hampshire, and the western part of Maine, and possessing one of the finest harbors in the world, where a navy, without using a spar, might ride out a tempest, it held in their eyes a place of no mean importance.

But the iron teeth that grinned on the forts at the mouth of the Piscataqua had hitherto been an effectual check upon their progress. Besides, several thousand well trained soldiers had been collected there, in anticipation of an attack, and whole companies of volunteers were daily arriving from the northern parts of the State, and even from the Green Mountains, panting with a desire for the conflict. Portsmouth, a small harbor town, was crowded with the bone and muscle of New England, all determined to defend the place to the last extremity. The shore was walked for day and night, by a corps of sentries, and every precaution taken to guard against surprise.

A notice of the approach of the war ships soon reached the town. The tall flag staff that had been placed near the mouth of the river, and was watched from the steeples, was seen to have been inclined toward the west, which was the signal of danger toward the north. And when the sun went down, not knowing how imminent it might be, the excitement that filled the place was tremendous. Drums were beating in hot haste, and couriers dashed through the streets like the wind. Every cart and carriage was busy in removing the women and valiant men to a station of security, and the soldiers, armed with their arms and renewed their charges in their pieces, and were ready at the tap of the drum or the blast of the bugle to spring to their defence.

The night gathered dark and chilly. The heavens looked watery and filled with gloom. A double watch was set upon the outposts, and the soldiers lay down to dream of their homes, or battle for the safety of their country.

No sooner had the darkness settled on the sea, than boats, just observable through the twilight, were seen passing between the enemy's vessels, and evidently bearing orders from one to the other, maturing their plans. Through the opened port-holes lights could be seen flying in all directions, and there were none who saw these movements who did not feel that the fate of Portsmouth would be decided be-

fore morning. All along the coast and on every eminence commanding a view of the vessels, were collected little companies of speculative watchers. On the east side of the river, were gathered ten or twelve men, noting every motion that was visible and listening to every sound that came from the water.

# The Bradford Reporter.

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HOW FETTER HATS ARE MADE

Although tens of thousands of felt hats are worn by the male sex—old and young—but few of the wearers have any idea of how these useful and ornamental head-coverings are made. A visit to the large establishment of P. Herst & Co., No. 308 Cherry street, New York, will give the information that could be desired; but, as only few of the many have the time to inspect its various apartments, we have saved them the trouble by a personal inspection, and will endeavor to interest and instruct by a short description of how felt hats of all shapes and sizes are made.

The fur generally used is that of the French Cony, the Scotch Cony, the Russian Hare, and the South American Nutria, but that of the Beaver, Otter, Muskrat, and American Rabbit is also used. The French fur is worth about \$2.50 a pound in gold, the Russian from \$2.50 to \$4.50; the Scotch \$3.65; the Nutria from \$5.50 to \$15, and Beaver from \$8 to \$10 in currency. The foreign fur is brought to this country neat, done up in white paper or in brown paper bags, and by the adoption of the necessary preventatives there is rarely any injury detected upon examination by the purchasers in this country.

When required by the workman a sufficient quantity of the fur is emptied from the paper packages into a large box, from whence it is removed and placed in a small machine, through which it gradually passes, becoming well shaken and mixed during its progress. It is then taken to one of the large and unwieldy-looking pieces of machinery known as "Blanchard's blowing machine," wherein the hair and dirt is separated from the fur, the latter for the first time acquiring any combined consistency and texture, and passing between a series of rollers, coils itself up into a box prepared for its reception. It is then divided up into lots, each lot being the quantity required for a single hat, and weighing from two ounces (sufficient for a small slouch) to five and one-half ounces, the weight of the army regulation hat, and is then ready to be formed.

This "forming" process is the most remarkable connected with this particular branch of manufactures. A lad, who is always at his post during working hours, places in a curious-looking machine the quantity of fur necessary to make a hat. Immediately at the other end of the machine stands a man with a perforated copper cone, some two-and-a-half feet high and three feet in circumference at the bottom. This cone is dampened, and the machinery being placed in motion the fur passes thro' the machine, and is torn into a thousand flakes, which being ejected rapidly from the funnel-shaped outlet, by suction scatter and fasten themselves upon the revolving cone, soon covering it with a smooth and compact surface. This cone is then covered with damp cloths, and after immersion in boiling water the fur covering is removed, and for the first time presents the appearance of a hat body, although, of course, of huge dimensions. It is then pressed in a blanket, and is by this means "hardened." It is then taken into the basement of a three-story brick building in the rear of the main structure, on Cherry street. Here are some seventy or eighty men, with their shirt sleeves rolled up, surrounding ten large kettles, or "batteries," as they are termed. Each man then takes four hat bodies as they are received from the hardener, and, placing them together, by continued rolling and dampening for an hour or an hour and a quarter, shrinks them to a size a little larger than that required for the hats he is ordered to make. From the sizing kettle it is taken to the shaver, an individual who, seated on a low stool, dexterously cuts with a large knife the roughness from the surface. From the shaver it is taken back to the sizer, who again dampens and rolls it for some twenty minutes, when it becomes shrunken to the dimensions desired. It is then taken to the upper part of the building, into the drying-room, where it is kept with some three thousand other hat bodies, for ten or twelve hours, with the thermometer denoting about 130 degrees. When it is well dried, the uncouth and conical shaped body is taken into another apartment, and the lower portion is first dipped into a composition of gum shellac, and then passed between rollers until the stiffening has become properly distributed.

Up to this time there is no appearance of a brim, but as soon as it is stiffened the body is taken to the sizer, who stretches it over a block, and by frequent manipulations, gives the lower portion a resemblance of that important part of a head covering.

The coloring is the next process. This is accomplished by means of large kettles in each of which thirty-six dozen hats are colored at a time. The principal colors given are black, nutria, pearl, beaver and mouse. The bodies are after being blocked and dried.

Notwithstanding the care of the shaver, the hat, when after coloring, presents a very rough appearance, its smoothness and finish being marred by outcroppings of hair, and to the "poncer" is entrusted the duty of giving it what is known as a cloth surface. The operation is accomplished by means of pumice stone and sand paper, and emory paper of different grades of fineness, each in its turn being rubbed around the hat body. After being thus smoothed, it is taken to the third story of the main building, where, in a large room extending along the entire front and through to the rear, stand forty or fifty men in the benches "finishing" hats. With the aid of a little emory and a hot iron, a competent and rapid hand is able to place in proper shape from twenty-five to thirty hats a day. When the finisher has performed his duty, the services of the "trimmer" are called into requisition. The trimmers are some forty or fifty young ladies, who, with their needles, manage during each day to line nearly fifty dozen hats. The binding and the fancy colored cord which joins the lining of the side with the centre piece, on which the mark or name of the manufacturer is stamped, are each stitched by a sewing machine, but all the other sewing and stitching is done by hand. The hats are then again ironed, and put together in pairs of six each, with narrow strips of tissue paper passing from rim to crown, for the purpose of protection. Each nest is then placed in a pasteboard box, and when twelve of these are placed in a wooden box, nothing more is to be done except to

have it properly marked and sent off to its destination.

In the packing-room we noticed several employees at work making what is known as the "Resorte" hat, which is nothing more than one of the ordinary slouches with the rim surrounded by a rim of steel wire similar to that used for hoop-skirts, and which is so tightly clamped that the brim has all the firmness and durability of that of the stiff felt hat, while the band has the flexibility of the soft slouch. This invention has almost entirely superseded the stiff brim.

FUN, FACTS AND FACETIE.

"Can you read smoke, ma?" "What do you mean, child?" "Why, I've heard some men talk about a volume of smoke, and I thought you could read any volume."

A lady at Terra Haute, Indiana, lost her "watch" in the street, and a little Scotch terrier seized it and shook it viciously. He probably snelt a "rat" in it.

The dandelion who was accused of breaking a young man's heart, has been bound over in the bonds of matrimony to keep the peace.

It is stated as a singular fact, that the smaller ladies' bonnets grow, the more they cost.

When you offer oats to a horse he may say "neigh!" but he don't mean it.

What is joy?—To count your money and find it a hundred pounds more than you expected.

"Illustrated with cuts!" said a mischievous young urchin, as he drew his knife across the leaves of his grammar. "Illustrated with cuts!" replied the schoolmaster, as he drew his rattle across the back of a mischievous urchin.

An exchange says that a divine out west is trying to persuade the girls to forego marriage. He says he succeeded so far as to persuade one, and she was about sixty years of age.

A woman out West, describing her runaway husband, says, "Daniel may be known by a scar on his nose—where I scratched him." We think Daniel did well to run away.

It is very strange that the most garrulous speakers, no matter whether in public or in private, are invariably those who are "unaccustomed to public speaking."

"I MOVED for my bleeding country," said a certain army contractor to General Sheridan. "So you ought, you scoundrel," replied Sheridan, "for nobody has bled her more than you have."

A MARRIED MAN who was out at a whist party, and he proposed going home was urged to stay a little longer. "Well," he replied, "perhaps I may as well—my wife probably is already as mad as she can be."

The bellman of Waterloo, announcing a teetotal meeting, said that he would be addressed by six females who had never spoken before.

The orator who "carried away his audience," is earnestly requested to bring it back, by persons who had friends present.

Why cannot a gentleman legally possess a smoking stick?—Because it can never belong to him.

At a Printer's festival lately, the following toast was offered:—"Woman—second only to the press in the dissemination of news!"

MR. HEN has started a new paper in Iowa. He says he hopes by hard scratching to make a living for himself and little chickens.

A CORRESPONDENT prescribes the following recipe to banish rats—catch them one by one and flatten their heads with a lemon squeezer.

"Aw! how do you like my moustache, Mith Maura?" piped a dandy to a merry girl. "O, very much. It looks like the fuzz on the back of a cat's paw."

A COUNTRYMAN was sowing his ground with some smart-fellowing seedling. It was one called to him with an insolent air, "well, honest fellow," said he, "your business to sow, but we reap the fruits of your labor." To which the countryman replied, "It's very likely you may, for I am sowing hemlock."

AS AN Dutch tavern keeper had his third wife, and being asked his views of matrimony, replied "Vul den, you see, de first time I marries for love—dat was goot; den I marries for beauty—dat was goot too, but dis time I marries for monish—dis is pester as both."

BIRDS has a great facility for getting things cheap. The other day he had a beautiful set of teeth inserted for next to nothing. He had kicked a dog.

SWEARING begins in anger; it ends by mingling itself with ordinary conversation.

With the exception, perhaps, of anger, fear is far more injurious of the human passions.

"The rich," said a poor Jew, "eat venison because it is deer; I eat nutmeg because it is sheep."

RIGHT AND WRONG.—A girl who was making a dress put the sleeves in wrong. She was unable to change them, as she could not determine whether she had got the right sleeve in the wrong place, or the wrong sleeve in the right place.

MURPHY was asked how it was so very difficult to wake him in the morning. "Indeed, master, it's because of ta'ing your own advice, always to attend to what I'm about; so whenever I sleeps I pays attention to it."

A LADY passing along the street, one morning last winter, noticed a little boy scattering salt on the sidewalks, for the purpose of clearing the way. "Well, I'm sure," said the lady, "that's real benevolence." "No, it ain't, ma'am," replied the boy, "it's salt."

A PHILOSOPHICAL cabman thus speaks of the section over which his wheels make their tracks: "you run over a youngster down here," said he, "the folks don't say nothing—'cause they have got to run over a goat or a kid, or a pig, and blest if a mob ain't arter you in two minutes."

MR. GREEN sued a lady for breach of promise. Her friends offered to settle it for two hundred dollars. "What?" cried Mr. Green, "two hundred dollars for ruined hopes, a shattered mind, a blasted life, and a bleeding heart? Two hundred dollars for all this? Never! never! never! Make it three hundred and it's a bargain!"

A CERTAIN minister going to visit one of his parishioners, asked how he had rested during the night. "Oh, wondrous ill, sir," replied he, "for mine eyes have not come together these three nights." "What is the reason of that?" said the minister. "Alas, sir," said he, "because my nose is betwixt them."

Two centuries ago, not one in a hundred wore stockings. Fifty years ago, not one boy in a thousand was allowed to run at large at night. Fifty years ago not one girl in a thousand had a waiting maid of her mother. Wonderful improvement in this age.

A STRANGER in a printing office asked the devil what his rule of punctuation was. "I set up as long as I can hold my breath, then I put in a comma, when I gap, I insert a semicolon; and when I want a chew of tobacco, I make a paragraph."

"WHAT ugly, cat-dog-headed little brat is that making?" Do you know his name?" "Why, yes—that is my youngest son." "You don't say so—indeed—why, what a dear little dove-eyed cherub he is, to be sure!" This is the fashionable, scientific way of backing "right square out."

REFINING OIL.

The process of refining oil has become so extensive that it may be interesting to many who have never been inside of an oil refinery to know a little concerning it.

The crude petroleum as it is received from the wells, being first introduced into the tanks or reservoirs for receiving, it is then conducted into the stills holding about 1,000 or 1,500 gallons each. The stills are made of boiler plate iron, which are found to be better than cast iron, which is liable to warp and crack from the effects of the heat. The carbonaceous particles form an incrustation on the inside which ought to be removed by a pick or sharp instrument for the purpose, at the end of each distillation; otherwise the bottom of the still soon burns out.

The contents of the still are washed off in about 24 hours, the temperature gradually raising up to 600 or 800 deg. Far. From the head of the still, the vapors pass through the worm of the condenser, which in the latter part of the distillation is not allowed to cool down sufficiently for the paraffine to condense in it; as this might, by causing obstruction, endanger the explosion of the still. By the proper regulation of the temperature of the water surrounding the worm, however, a steady flow of oil will go on from the end of the worm. The quantity obtained is about 90 per cent. of that introduced into the stills, but although freed of this amount of impurity, the oil is still of a greenish hue, and retains more or less of its peculiar odor.

The next process is the chemical treatment with sulphuric acid. This is called the cold process. The oil is transferred to large wrought iron cylindrical vessels called agitators, probably containing 3,000 gallons each, and for each barrel of oil is added one-half gallon of sulphuric acid. The mixture is violently agitated, by the insertion of 3-inch pipe, through which is forced a current of compressed air, which keeps the whole in a state of violent ebullition. This having been kept up for some time, and the mixture being left some time in repose, and considerable portion of the impurities settle with the acid to the bottom, from which they are drawn off, leaving the partially purified oil in the cisterns with some acids and impurities still adhering to it. These are mostly removed by agitating again with water, and again, after a repose of some hours, drawing off the matter which has collected in the bottom.

A strong ley of soda is introduced into the oil in the agitator, and it undergoes the same process of agitation as with the acid. The sediments being drawn off the operation is again repeated, when the oil is then submitted to the fire test.—The fire test is simply the temperature at which the oil will ignite. The best illuminating oil should not ignite over a temperature of 115 deg. to 12 deg. Far. otherwise it burns with a dull light. If it ignites at 100 deg. it contains too much benzine, and is liable to explode. After the whole process is completed, the residuum is sold here for \$5 per bbl. for lubricating purposes, excepting about 1 per cent., which goes to waste.

In some refineries the oil undergoes a second distillation, the first product of which is very light oil, which, if at first somewhat discolored, is soon succeeded by a limpid oil that continues with very little variation, except that it gradually becomes heavier, and includes all that distillate below the gravity of 0.820. The products which succeeded this are the heavy oils for lubricating, which pass into the last product of dark colored heavy oils, which may be made to give up a considerable part of their paraffine by leaving the liquid in tanks exposed to a temperature as cold as may be.

The paraffine condenses in light silvery scales, and is recovered by draining off the oil, and then subjecting it to hydrostatic pressure. It is purified by successive applications of sulphuric acid, hot water and alkalis.

The illuminating oils may be almost entirely freed from the odor and color they possess, by standing several days over alkaline solutions in shallow vessels. This, however, is not supposed to improve the quality of the oil.

THOUGHTS ON RELIGION.

Many years ago, the poet Whitier penned the following beautiful thoughts on Religion, which best show the deep, devotional nature of the writer's mind, and will not fail to gratify and benefit the souls of all who read them again. "We pity the man," said he, "who has no religion in his heart—no high and irresistible yearning after a better and holier existence; who is contented with the sensuality and grossness of earth; whose spirit never revolts at the darkness of its prison-house, nor exults at thoughts of its final emancipation. We pity him, for he affords no evidence of high origin, no manifestations of that high prerogative, which renders him the delegated lord of the visible creation."

He can rank no higher than the animal nature; the spiritual soul never stoops so lowly. To seek for beastly excitement—to minister with a bountiful hand to depraved and strong appetites—are attributes of the animal alone. To limit our hopes and aspirations to this world is like remaining forever in the place of our birth, without ever lifting the veil of the visible horizon which bent over our infancy.

There is religion in everything around us; a calm and holy religion in the unbreathing things of nature, which men would do well to imitate. It is a meek and blessed influence, stealing in, as it were, unawares upon the heart. It has no terror—no gloom in its approach. It does not rouse the passions. It is untrammelled by creeds, and unshadowed by the superstitions of men. It is fresh from the hands of the author, and glowing from the immediate presence of the Great Spirit, which pervades and quickens it. It is written on the arches sky. It looks out from every star. It is on the sailing cloud, and in the invisible wind. It is among the hills and the valleys—where the shrubs and mountain tops pierce the thin atmosphere of eternal winter, with its dark waves of green foliage. It is spread out like a legible language upon the broad face of the unsleeping ocean. It is the poetry of nature. It is this which uplifts the spirit within us, until it is tall enough to overlook the shadows of our place of probation; which breaks, link after link, the chain which binds us to materiality; and which opens to our imagination a world of spiritual beauty and holiness."

HOW JONES POPPED THE QUESTION.

Too bashful to "pop the question" in the usual way, Major Jones persuaded his sweetheart to put up a steaking, which will hold a couple of bushels, on the night that Santa Claus pays his visits, receiving her promise to keep for ever what he gave her. In this the gallant and lovelorn Maj. contrives to introduce himself at the "witching hour of night." But we will let the Major speak for himself:

I remained up till midnight, and when they were all gone to bed I softly went in to the back gate and went up to the porch, and thar, shure enuff, was a great big meal bag hanging to the joce. It was monstrous unkindly to get to it, but I determined not to back out. So I set some chairs on the top of the bench and got hold of the rope and let myself down in the bag; but just as I was getting in, the bag swung against the chairs, and down they went with a terrible racket. But no body didn't wake up but Miss Stalliness' gracie dog, and here he cum ripin' and tarin' through the yard like rath, and round and round he went, tryin' to find out what was the matter. I sot down in the bag and didn't breathe louder than a kitten, for fear he'd find me out. The wind began to blow 'bout a cold, and the old bag kept turning around, swinging so, that to make me see sick as the mischief. I was afraid to move for fear the rope would break and let me fall, and thar I sot with my teeth rattlin' like I had the ager.

It seemed it would never come daylight, and I do believe if I didn't love Miss Mary so powerful, I would have froze to death; for my heart was the only spot that felt warm, and it didn't beat more than two licks a minute, only when I thought how she would be surprised in the mornin', and then it went on a canter. Bimeby, the cursed old dog came on the porch, began to smell about the bag, and then to bark like he thought he'd trecked somethin'. "Bow, wow, wow!" sez he. "Begone you abominable fool," sez I, and I felt all over in one spot, for I spected he'd nip me; and what made it worse, I didn't know whereabouts he'd take hold. "Bow, wow, wow!" Then I tried coaxing. "Come here, good feller," sez I, and I whistled a little to him; but it was no use. There he stood and kept up his eternal whinin' and barkin' all the night. I couldn't tell when daylight was breakin', only by the chickens' cawin', and I was monstrous glad to hear 'em, for if I'd had to stay one hour more, I don't believe I'd ever got out of that bag alive.

They got him in the mornin', covered with meal and almost frozen. But Miss Mary does not refuse his present. And he says, "I tell you what it was worth hanging in a bag from one Christmas to another to feel as happy as I have ever since!"

FAST YOUNG LADIES.—In order to be a fast young lady, it is necessary to lay aside all reserve and refinement—everything that savors of womanly weakness; to have no troublesome scruples, but to be ready to accord an appreciating smile to the broadest joke. There must be no feeling of dependence on the stronger sex; but, by adopting, as far as decency permits, masculine attire, masculine habits, and masculine modes of expression, accompanied by a thorough knowledge of slang, and a fluency of using it, these ladies show themselves to be above all the ordinary prejudices. There must be no thinking about other people's feelings; if people will be thin skinned, let them keep out of their way at all events. Should "mama" raise her voice in a feeble remonstrance, the fast young lady impresses upon her that "she is no judge of these matters. In her old school days, everything and every one were slow; but it is quite changed now." In short, to sum up, to be a fast young lady, modesty, delicacy, refinement, respect for superiors, consideration for aged, must all be set aside; boldness, independence, irreverence, brusqueness, and, we fear, too often heartlessness, must take their place.

A GOOD CHARACTER.—A good character is to a young man what a firm foundation is to the artist who proposes to erect a building on it; he can well build with safety, and all who behold it with confidence in its solidity—a helping hand will never be wanted; but let a single part of this be defective and you go on a hazard, amidst doubt and distrust, and to one to one it will tumble down at last, and mingle all that was built on it in ruin. Without a good character poverty is a curse; with it, scarcely an evil. Happiness can not exist where good character is not. All that is bright in the hope of youth, all that is calm and blissful in the sober scenes of life, all that is soothing in the vale of years, centres in and is derived from a good character.—Therefore acquire this as the first and most valuable good.

WE saw a boy the other day borrow a stick of candy from a comrade to show him that he could pull it out of his ear. He swallowed it, and then twisted himself in various ways to extract it, but at length informed his companion that he had forgotten that part of the trick.

WE see it recorded that a soap pedler was recently caught at sea during a violent storm, when he saved his life by taking a cake of his soap and washing himself ashore. This soap, or the story, must have been made from very strong lye.

KINDNESS and cheerfulness can remove more than half the wrinkles out of the forehead of age.

SHORT AND SWEET.—"Why, you see when my man come courtin' me," said Mrs. Dobson—"I hadn't the least thought of what he was after—not I. Jobie came to our house one night after dark, and rapped at the door. I opened it, and there sure enough stood Jobie right before my face and eyes."

"Come in," says I, "and take a cheer."

"No, Lizzie," sez he, "I've come on an errant, and I always do my errants fast."

"But you'd better come in and take a cheer. What is your errant?"

"Courtin' business. My wife's been dead these three weeks, and everything's going to rack and ruin right straight along. Now, Lizzie, if you've a mind to live me, and take care of my home an' children, an' my things, tell me, and I'll come in and take a cheer; if not, I'll get some one else to."

"Why, I was skeered, and said: 'If you've come on the courtin' business, come in. I must think of it a little.'"

"No, I can't till my errant's done."

"I should like to think about it a day or two."

"You needn't, Lizzie."

"Well, Jobie, if I must, so here's to you, then."

"So he came in. Then he went after the equire; and he married us right off, an' I went home that very night. I tell you what it is, these long courtin's don't amount to nothing at all. Just as well do it in a hurry."

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