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The New Iron Steamer "Scotia."

The new steamer *Scotia*, the latest built of the Cunard line, has been here for two weeks, and departed the 4th inst., on her first return voyage to Liverpool Considerable interest has been largest merchant vessel afloat with the exception of the *Great Eastern*, and also because she is the latest effort of the celebrated engineering firm of Robert Napier and Son of Glasgow, Scotland. She is builtly entirely of iron, and is a paddle-wheel steamer. Her tunnage by builder,s measurement is 4,050 tuns; the length of keel and forerake is 360 feet; length over all, 400 feet; breadth, 47 feet; depth, 32½ feet She exceeds the *Persia* in capacity by 450 tuns. When loaded to 22 feet she displaces 6 500 tuns. Immense in size as the *Scotia* is, she is so well proportioned and sits so gracefully in the water that she does not appear to be such a large vessel as she really is. Her engines are two in number and are splendid specimens of mechanical skill; they are rated at 883 nominal horse-power, but are capable of working up to 3,000 united horse power. They are of the old side-lever pattern, with several new attachments The valves used are Waddle's (engineer of the *Persia*), balanced double port E-slide kind. Each of the steam cylinders is 100 inches diameter by 12-foot stroke—two ft. longer than the engines of the *Persia*. The pressure of steam carried is 25 lbs, and it is superheated to 318° Fah. Two superheaters are employed; each has 14 pipes, while the steam flows around them on its way to the cylinders. The superheaters can be disconnected from the boilers at any moment by a valve The saturated brine water, in being discharged from the boilers, passes around a series of pipes, while the cold feed water goes through them on its way to the boilers. By this arrangement the feed is raised to about 150° before entering the boiler. Four large tubular boilers, having 40 furnaces, are used. The main intermediate shaft between the two engines is 31 inches in diameter; the side levers (inverted beams) are each composed of two plate of rolled iron 22 feet in length, 7 feet wide at the middle and 2½ inches in thickness. The rolling of these immense plates was a work of great difficulty. Only one firm in England would undertake the task, and out of the first eight plates that were rolled, seven were rejected on account of defects. All the parts of these engines are massive; some idea may obtained of the size of their parts by stating that one of the slide valves weighs no less than two tuns. The paddle wheels are 40 feet 8 inches in diameter; and she is provided with Silver's marine governors.—Two small donkey engines, two hoisting engines and one steam pump are used on board. The coal bunkers contain 1,800 tuns fuel.—A government safety valve is attached to each boiler, and is locked up from the engineers. It is examined at Liverpool by the Surveyor of the Port under the Board of Trade.

The *Scotia* is of unusual strength; her keel plates are 1 1-16 inches in thickness; the bottom plates are 15-16 of an inch; hence up to the load line ⅞-inch plates, and above this 13-16 inch plates. The framing is composed of ponderous bars and angle iron welded and riveted in the most perfect manner. She is divided into seven water-tight compartments, and carries 1,500 tuns of merchandise in two water-tight tanks 75 feet by 20 in length and 20 feet in depth.—There are 157 state rooms, with sleeping accommodations for 400 cabin passengers.—The main saloon is 62 feet in length by 20 feet in breadth, and is 8 feet high The decorations of the staterooms are tasteful and elegant.

Every thing about this great steamer gives indication that her owners have spared no expense to make her the most perfect passenger steamship ever built.

Embalming the Dead.

A Washington correspondent gives the following account of the process of embalming:—

The body is placed on an inclined platform, the mouth, ears, nose, &c., are stopped with cotton; if wounded, cotton is put in the wound, and a plaster is put on; an incision is mode in the wrist, the attachment is made from an air pump, and fluid is ejected into the arteries. The wound is then sewed up and the body is hoisted to dry. To save the eyes from sinking in wax is put under the eyelids The hair is found to come out very easy, but after the embalming it could not be removed. The bodies take on an average about seven quarters. There were some eight bodies on hand; some had been there thirty days. The operators say that in four months the body will become solidified like marble, but no change has yet been had to prove it. Colonel Baker's body, on arriving at San Francisco, was in an advance state of decomposition. Dr. Holmes, late of Williamsburg, Long Island, is the oldest in the business here, and I am informed he has made $20,000. Messrs. Brown & Alexander are trying to get a bill through Congress for the exclusive right to embalm bodies, and to have Congress authorize a corps of embalmers for each division. The charges are $56 for an officer and $25 for a private, and I must say the bodies are as life-like as if they were asleep.

Steam against Horses.

In some of the cities in England and Scotland, where large engineering establishments require heavy loads to be drawn to considerable distance, traction steam engines are now being employed In Glasgow, for example, it has become a common thing to see a steam engine hauling huge pieces of mechanism through the streets to be shipped on board of vessels in the river. Lately the hull of a small iron screw steamer was drawn a distance of one mile and half from the place where it was built, and launched in the river Clyde; and a few days afterward a huge steam boiler, weighing 30 tuns, was drawn a distance of about half a mile in fifteen minutes, with the same engine, to be placed on board of a steamer. It would have taken 20 horses or 300 men, one hour's labor, to have moved this boiler the same distance. It appears to us that an engine of this character would be very useful and would find plenty of employment in any of our large American cities, in drawing blocks of stone, heavy castings, &c. We lately saw a huge 10 inch navy gun lying on the pavement in Market street Phiadelphia, about a mile from the place where it was to be taken, and it had been thus lying for several days to the difficulty experienced in drawing it through the city by a long train of mules and horses. A single traction steam engine of the power of the one used in Glasgow, could have drawn three such guns the distance required in half an hour. We trust this important subject will receive the general attention which it deserves.

Nails in Fruit Trees

A singular fact and one worthy to be recorded, is mentioned by Mr. Alexander Duke, of Albermarle He states that while on a visit to a neighbor, his attention was called to a large peach orchard, every tree of which was totally destroyed by the ravages of the worm, with the exception of three, and these were the most thrifty and flourishing peach trees he ever saw. The only cause of their superiority known to him, was an experiment made in consequence of observing that those parts of worm-eaten timber into which nails had been driven were generally sound. When his trees were about a year old; he drove a tenpenny nail through the body, as near the ground as possible; while the balance of his orchard had gradually failed, and finally yielded entirely to the ravages of the worms these three trees, selected at random, treated precisely in the same manner with the exception of the nailing, had always been healthy, furnishing him at the very period with the greatest profusion of the most luxrious fruit. It is supposed that the salt of iron afforded by the nails is offensive to the worm, while it is harmless, perhaps beneficial to the tree.

A chemical writer on the subject says: "The oxydation or rusting of the iron by the sap, evolves ammonia, which, as the sap rises, will of course impregnate every particle of foliage, and prove too severe a dose for the delicate palate of intruding insects."—The writer recommends driving half a dozen nails into the trunk. Several experiment of the kind have resulted successfully.

Plant an Apple Orchard.

When apples are $3 a barrel and upward there is not adequate supply in the country. They can be grown at a dollar a barrel, with profit. The apple crop in a single small county in the State of New York, was worth half a million of dollars last year.—Other counties in the Eastern States were under the necessity of paying out $100,000 for this fruit, because they had not the article at home. Peaches and plums we may get along without, but apples we must have—for the dessert, and for the dinner basket of little boys and girls who can not come home from school to dine, and for many other uses. We say, then, to every farmer plant an orchard of at least a hundred trees. The trees are all ready for you in the nursery well grown and grafted, two or three years from the bud. Get thrifty trees of varieties that you know will flourish in *your* locality, and in four years you will be eating fruit from them. Do not fail to plant an apple orchard this very month.—*American Agriculturist.*

HOUSES IN THE UNITED STATES.—There is one house to every six persons in the country. In New York city there are thirteen persons to a dwelling on the average; in Boston about nine; in New Orleans nearly seven.

CALL A MAN!

Any one who is disposed to try a laugh will do well to read on.

John Jackson was a hard working man of twenty-three. Being the eldest and only son, he had always remained at home, assisting his father upon the farm. John was much respected by every one in the neighgor hood, and many a bright-eyed girl had thought she would like to be Mrs. Jachson. But John was no 'ladies' man'. The fact was, he was bashful. He would rather hoe potatoes all day than undergo the ceremony of an introduction to a young lady. Not that John disliked the dear creatures; far from it. We believe that he, common with all bashful and well meaning men, entertained the very highest respect and admiration for them. And this no doubt was the principal cause of his bashfulness. He felt that they were superior beings, and that he was unworthy to associate with them upon terms of equality. But we cannot stop to moralize.

Nancy Clark was the daughter of a very respectable farmer, whose land adjoined the Jackson farm. Nancy was a pretty, saucy, little witch, and she liked John Jackson—When they were children they attended the same school, and when he was a few years her senior, was usually her champion in the childish disputes that arose, and her companion in coming and going. At last, John became so much of a man as to be kept from school, as she had been in past years. John discovered, too, he was growing out of shape. His feet and legs appeared very awkward; his face pained him, and taking all in all, he was inclined to think he was not more than half put together.

As novelists say, it was a lovely day in August. The sun was clear, serene, and beautiful, the trees were loaded with golden fruit, and the beautiful birds twittered their songs of love in the branches Earth (there, we've slid down to earth once more; such lofty heights—they make our head dizzy.) We were prepared to say that earth yielded a bountiful harvest of grass and clover, and honeysuckles, which this noble yeomanry of Chesterville had garnered within her store-houses'—but upon a second thought have concluded it thus:

"The farmers of Chesterville have done harvesting."

John Jackson's sister had a quilting that afternoon. His father had gone to "Keith's Mills" to get some wheat ground, and left John to repair some tools, to be ready on the morrow, to commence mowing the meadow grass. Suddenly it occured to John that if he remained about the house that afternoon, he would be called in at tea time and required to do the honors of the table. To avoid this, he quietly shouldered his scythe and stole away to the meadow, half a mile distant, fully resolved that he would not leave there until it was so dark that he could not see to mow, so as to avoid seeing the girls.

The meadow was surrounded on all sides by a thick forest, which effectually shut out what little breeze there might chance to be stirring. The sun poured its rays as though the little meadow was the focus point where the heat was concentrated. John mowed and sweat—sweat and mowed, until he was so dark that he could not see to mow, so as to avoid seeing the girls.

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So John stripped off, and with no cover save his linen—commonly called a shirt—he resumed his work. He was just congratulating himself upon the good time he had made from meeting the girls, when he chanced to disturb a huge black snake, a genuine twister, with a white ring around its neck.

John was no coward, but he was mortally afraid of a snake. "Self preservation" was the first "passage" that flashed across his mind, and "legs take care of the body" was the next. Dropping his scythe and springing like a top, he was ready to strike a 2.40 gait, when at that moment the snake was near enough to hook his crooked teeth into John's shirt above the hem.—With a tremendous spring he started off with the speed of a locomotive. His first jump took the snake clear from the ground, and as he stole a hasty glance over his shoulder, he was horrified to see the reptile securely fastened to the extremity of his garment, while the rapidity with which he rushed forward, kept the serpent extended to an angle of ninety degress with his body.

Here was a quandary. If he stopped, the snake would coil about his body and squeeze him to death; if he continued the race he must fall from sheer exhaustion.—On he flew, scarce daring to think how this dreadful race was to end. Instinctively he had taken the direction of home a feeling of security came over him—Suddenly flashed across his mind the true state of affairs—his father gone—the quilting, and worse than all, the girls? The next noment he felt the body of the cold clammy monster in contact with his bare legs, his tail creeping around them in a sort of cozening way, as by way of tickling John upon the knees.

This was too much for human endurance. With a yell, such as man never uttered, save in mortal terror, poor John set forward at a breakneck speed, and once more he had the pleasure of seeing the snake resume his horizontal position, somewhat after the tail of a comet

On, on they flew! John forgot the quilting, forgot the girls, forgot everything but the snake.

His active exercise (he paid particular attention to his running,) together with the excessive heat, had brought on the nose bleed, and as he ran, ears erect and head thrown back, his chin, throat and shirt bosom were stained with the flowing stream.

His first shriek had started the quilters, and forth they rushed, wondering if some Indian was not prowling about. By this time John was within a few rods of the barn, still running at the top of his speed, his head so that he might keep one eye on the snake and with the other observe what course he must take. The friendly barn now concealed him from the sight of the girls.—He knew the girls were in the yard, having caught a glimpse of them as they rushed from the house. A few more bounds and he would be in their midst. For a moment modesty overcame fear, and he halted.—The snake evidently pleased with his rapid transportation, manifested his gratitude by attempting to enfold the legs of our hero within his embrace.

With an explosive "ouch" and urged forwardly circumstances over which had no control, poor John bounded on. The next moment he was in full view of the girls and as he turned the corner of the barn the snake came round with a whiz, somewhat after the fashion of a coach-whip,

Having reached the barnyard, to his dismay he found the bars up. But time was too precious to be wasted in letting down bars. Gathering all his strength, he bounded into the air snake ditto; and as he alighted on the other side, his snakeship's tail cracked across the upper bar, snapping like at Indian cracker.

Again John set forward, now utterly regardless of the girls, for the extra tickle from the snake's tail as he leaped the bars, banished all his bashfulness and modesty, and again he had the pleasure of finding the snake in a straight line, drawing steadily at the hem of his solitary garment.

The house now became the centre of attraction, and he revolved with the speed of thought. Four times in each revolution, as he turned the corner, his snakeship came round with a whiz that was quite refreshing.

While describing the third circle, as he came near the group of wonder-struck girls without removing his gaze from the snake, ha managed to cry out:

"Call a man!"

The next moment he had whisked out of sight, and as quick as thought reappeared at the other side of the house:

"Call a man!"

Away he whirled again, turning the corner so rapidly that the whiz of the snake sounded halfway between a low whistle and the repeated pronunciation of doubie-o.

Before either of the girls had stirred from their tracks, he had performed another revolution.

"Call a man!"

Away he flew once more, but his strength was rapidly failing. Nancy Clark was the first to recover her presence of mind, and seizing a hoop-pole, she took her station near the corner of the house, and as John reappeared, brought it down upon the snake with a force that broke his back and his hold upon John's nether garment at the same time.

John rushed into the house and to his room, and at tea-time appeared in his best Sunday suit, little worse for the race, and to all appearance entirely cured of his bashfulness That night he walked home with Nancy Clark. The next New Year they were married; and now, whenever John feels inclined to laugh at his wifes hoops, or any other peculiarity, she has only to say, "Call a man!" he instantlandy sobers down.

A Remedy for Smallpox

Dr. Frederick W. Morris, resident physician of the Halifax Visiting Dispensary, N. S., has written a letter to the *American Medical Times*, in which he states that the "Sarracenia Porpurea," or Indian cup, a native plant of Nova Scotia, is the remedy for smallpox in all its forms, curing in twelve hours after the patient had taken the medicine. That "however alarming and numerous the eruptions, or confluent and frightful they may be, the peculiar action of the medicine is such that very seldom is a scar left to tell the story of the disease."—If either vaccine or variolous matter is washed with the infusion of the sarracenia, they are deprived of their contagious properties. So mild is the medicine to the taste that it may be largely mixed with tea and coffee and given to connoisseurs in these beverages to drink without their being aware of the admixture. The medicine has been successfully tried in the hospitals of Nova Scotia and its use will be continued.

FEEDING GRAIN TO COLTS.—A subscriber inquires of the *American Agriculturist* whether it is advisable to feed oats to colts in winter; some of his neighbors think the practice injurious. It is objected that grain of any kind is too stimulating for young animals, and that they will grow up more hardy if kept on scanty feed. We regard this as an error The usual food of an animal, including grain is not stimulating in the same sense as the spices and drinks used by man; were that the case, there would be no question as to the impropriety of allowing grain to young horses or other animals. Grain contains more nutriment than the same bulk of straw or hay. If fed in large quantity to one not worked sufficiently to keep the digestive powers very active, the stomach and other organs will be impaired, and the health of the animal will be injured. But given judiciously, grain promotes the growth and strength of horses either young or old.—The proper way to harden an animal, is not to cramp the growth of its organs, but to develop them to the fullest extent; and nutritious food is indispensible to this end.

QUANTITY OF FOOD FOR OXEN.—Frequent observations have shown that an ox will consume two per cent of his weight of hay per day to maintain his condition. If put to moderate labor, an increase of this quantity te three per cent will enable him to perform his work, and still maintain his flesh. If he is to be fatted, he requires about four and a half per cent of his weight daily in nutritious food

POWER OF IMAGINATION.—In illustration of the power of imagination, the case of the old lady who watched the vane, to see when her rheumatism was going to begin, is not equal to that of the storekeeper who painted the lower part of his stove red, and saved seventy-five per cent in the consumption of wood during the winter. The illusion was so complete, that one man tried to make him pay for a pair of boots that he had burnt on the stove.

SERIOUS ACCIDENT.—An industrious and respectable mechanic, named Levi Jones, was unfortunately caught between the cogs of a portion of the machinery in the steam saw-mill of R. Salter, Esqr., yesterday afternoon, when one of his legs was so dreadfully mangled as to render his chance of recovery from the shock almost hopeless. Medical aid was promptly furnished, but up to the time of our going to press, we had not learn whethe amputation was considered advisable or not.—[Globe.

Bedford, Pim, a commander in the British Navy writes to the London *Athenæum* that the shortest route from England to Australia is across Central America, and the necessity of such a route he thinks imperative. He says the Panama route, in spite of its cost has been eminently successful, and because it is a monopoly and subjected to political disturbances, he urges a new route, where the ports are first rate, and which would be compassed in less time than that by Panama.

Gen. Dix has removed in a great measure the restrictions on trade at Norfolk and Portsmouth, thus affording great relief to the loyal inhabitants He has also stopped the examination of crop letters in the post-offices of these cities.

A WOMAN AT THE BOTTOM OF IT.—It is charged that the individual in Gen. Halleck's army, who has for some time furnished news of the Federal movements to Beauregard is the brother of Gov. Yates Illinois.—This brother fell in love with one of two sisters named Irwin, who pretended to be loyal, but were really rebels. Fascinated by them he was made to reveal the secrets of the army, which were at once conveyed to the wrong side.

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