## AT SEA.

O, we go down to sea in ships—
But Hope remains behind,
And Love, with laughter on his lips,
And Peace of passive mind;
While out across the deeps of night,
With lifted sails of prayer,
We voyage off in quest of light,
Nor find it anywhere.
O, Thou, who wroughtest earth and sea,
Yet keepest from our eyes
The shores of an eternity
In calms of Paradise,
Blow back upon our foolish quest
With all the driving rain,
Of blinding tears and wild unrest,
And waft us home again.
—James Whitcomb Riley.

# Sandvig and St. Xavier.

BY FRANKLIN WELLES CALKINS.

When Hercules Dousman was chief factor for the Astor Company at Prairie du Chien, he used frequently to tell the story of Sandvig and St. Xavier, who were perhaps as oddly assorted a pair of friends and partners as ever got together.

They were trappers. Ole Sandvig was a flaxen-haired Norse giant, who stood six feet four in his moccasins, weighed over two hundred pounds, and had not an ounce of flesh to spare. Denis St. Xavier was a dwarf in size, black as an Indian, and bow-legged as a voyager boatman. Ole was the soul of good humor, and Denis was choleric and at times rashly abusive.

Both, however, were of undoubted courage, and more than once the hot-headed little French-Canadian was rescued from the perils of a dangerous quarrel by the prowess and vast strength of his big partner.

There had been a protracted and severe drought in the upper Mississippi country, and the smaller streams and lakes had all gone dry. Fur-bearing creatures were driven in upon the large streams, and the Mississippi itself became prime trapping-ground for gathering beaver, muskrat, mink and otter pelts. As there was little snow for several winters, many of the trappers made their daily rounds upon skates, and covered a wide extent of territory.

During the last of these dry years Sandvig and St. Xavier chose trapping-grounds some fifty miles below Prairie du Chien and above the mouth of an Iowa river. There were, as these trappers believed, no Indians wintering nearer than the villages of the Sacs and Foxes some distance away, and they put out long lines of traps without attempt at concealment.

One night in November there came a "dry freeze" which scaled the Mississippi over with glare ice, and when, on the following day, the trappers went their rounds on skates, both were much astonished and mystified to find that every trap had been stoken on each bank of the river.

When they compared experiences at night, they came to the conclusion that Indians must be lurking in the neighborhood. On the next morning they skated down the Mississippi to the mouth of the little river some miles below their shack, and there discovered traces of two canoes which had evidently broken through a thin scum of ice in making their way upstream.

Instantly the mystery of the stolen traps was solved. Indians had, early on the night of the first freeze, gathered the whole "line." In returning in their canoes, they had found the mouth of the small stream thinly covered with ice.

St. Xavier broke out in a frightful temper, and to Ole's advice that they secure aid from the trappers up the river he would not listen. What were five, six, ten pilfering Indians, he asked, that two good men should fear them? Had not Baptiste Le Bon gone alone to Wabasha's Sioux village after his stolen gun, and didn't he make them give it up? Well, then!

And so the two skated on up the little river in search of the thieves.

And they ran quite suddenly upon an Indian village of newly built lodges—a dozen or fifteen of them—upon a marsh island formed by an arm, or broad bayou, of the river. The lodges were of woven willow built in a marsh of tall corn-stalk grass, with closely tied bundles of which they were heavily thatched. They were protected from fires by the watercourses, and from the winds of winter by the thick fringes of willows.

The trappers boldly approached this Iowa town, walking up a narrow path where the swaying corn-stalk tops brushed Ole Sandvig's shoulders.

But when, on arriving at the lodge of the chief, they found that Conkey John, a notorious Musquakie scalawag, was "head man," they abandoned all hope of immediately recovering their traps. Only the summer before, at "the prairie," St. Xavier had offended this redoubtable scoundrel by telling him some emphatic truths about his dishonorable career.

Nevertheless the trappers boldly entered Conkey John's teepee, and demanded their traps and peltries. Conkey John's answer was characteristic of that wily thief. The fellow had picked up, somehow, a fair smattering of English.

"Ho! You tlaps?" he inquired. "Heap Sac up libber (river). He go by las' night. Him have many tlap; heap muslat; heap skin."

The trappers knew Conkey John lied, and his shrewdly twinkling eyes betrayed his enjoyment of the situation.

St. Xavier poured forth a torrent of angry threats, until Sandvig, dragging him from the lodge, compelled him to be quiet. There was nothing for it but to return to Prairie du Chien empty-handed, and the sensible Norwegian wished to make a prudent retreat from so dangerous a nest of freebooters.

A wind, which had risen that morning, had increased to a gale, and was blowing directly in their faces as the trappers put on their skates at the lower extremity of the island. Ole Sandvig cast several furtive glances behind him, and cocked his gun. When he had securely fastened his skates, the Norseman rose to peer over the top of the waving grass.

At the same moment St. Xavier's rifle cracked, and Sandvig turned to see that the angry Frenchman had fired into a thick tuft of grass. Instantly Ole darted forward to smother the first tiny shoot of flame, but the wily Denis tripped him, and both men sprawled on the ice.

Before Sandvig could regain his feet, flames, blown upon by the high wind, leaped higher than his head.

"Now come!" he shouted angrily at his mate. "Ve sall boto be killed, oder ve skato mighty fast already!"

But St. Xavier could not skate at all. In the collision with Sandvig he had broken both runners. He was already unbuckling the useless skates. He looked up, grinning ruefully.

"De las' of St. Xavier," he said. "Ole, you geet out of dis."

The big Norwegian glared at his audacious partner for an instant while the flames crackled and roared inland. "De onliest time," St. Xavier used to say afterward, "dat ever I see Ole Sandvig mad."

Ole wasted no words in his wrath. He flung off his greasy leather coat, cut off the sleeves and ripped them into string. Then he seized the little Frenchman, bundled him into the armless garment, and made the live package fast to his belt behind. Then, leaving both their guns upon the ice, he skated away into the teeth of the wind.

Thus helplessly dragged, St. Xavier looked back to see the Indian town already ablaze, and the helpless Musquakies, men, women and children, running out upon the ice. Now that he had time to reflect, he doubted if, with his short legs and heavy body, he could even have skated away from those Indians. Some of them would of course cross the V-shaped peninsula between the rivers to throw themselves across Ole's path, and others would follow directly upon his trail.

Ole was a magnificent skater, but St. Xavier knew that he was a heavy drag. He wished he had clung to his gun, and made Ole save himself.

The big Norseman bent against the fierce wind, and plied his skates with might and main. If only he might make the turn, some three or four miles distant, and get started with the wind before those Indians should cross the neck! That was Ole's sole hope of escape.

Not once did the swift skater look behind. Bent almost double, he turned curve after curve of the river, and the helpless St. Xavier slipped and slewed, and sometimes rolled over and over at his heels. A half-hour's struggle against the fierce gale left Ole pretty well blown when the turn came; and even then he dared not abate his tremendous exertion. He skated almost at the speed of the gale for two miles or more.

Then, in emerging from an island channel, the skater saw that his long and exhausting burst of speed had been without avail.

The fleet-footed Musquakie runners were ahead of him. Ranged across the ice-channel, a score of Indians stood ready to converge their line upon any point at which he might aim. And owing to the great drought, the channel was less than a quarter of a mile in width.

At first Ole was inclined to turn back and race against the wind again. Then his shrewd eyes, running along the row of clearly outlined figures, noted that the Indians were armed, if armed at all, with their knives only. Seeing that he and St. Xavier had discarded their guns, they had themselves raced across the neck in lightest running gear; and so Sandvig, gathering his energies for a mighty burst of speed, bore down upon the left wing of the enemy. Their center and right swung about in a sliding, scrambling semicircle to close in upon him.

Instead of attempting to dodge the gathering knot in his front, Sandvig dove straight at the group. He knocked two Indians out of his path, and tore through the crowd of savages like a cannon-ball. Nevertheless, he felt an extra tug at his rope, and glancing behind, saw that an Indian was clinging to one of St. Xavier's feet.

Ole then gave himself up for lost. His speed was greatly retarded by this fresh clog, and a horde of yelling Indians were at his heels. But St. Xavier drew the sliding Indian toward him by simply doubling his legs, and then delivered a kick with his free foot, which, being well directed, rid him of his incubus.

Nevertheless, Ole, tired and breathless, was now no more than a match for the Indian runners. These were clad only in shirts and leggins, and, almost as sure-footed as the skater, leaped and slid on their moccasins now almost as fast as the tired trapper on his steel runners.

At the end of another quarter-hour the pursuers were running like a persistent wolf-pack close upon Ole's heels. Ten or twelve of them were so close that a single mishap would pile them, in a vengeful heap, on Ole and St. Xavier.

As for the Frenchman, he found some satisfaction in shouting defiance at the Musquakies. Having one free arm, he also flourished at them a knife which he held ready, at the last extremity, to cut the thong above his head, and thus leave Ole free to fight or save himself if he should choose.

The Indians made no answer to St. Xavier's revilings. Like the skater, they bent every energy upon winning the hotly contested race, and they were pricked on by the keenest of savage incentives—the lust for revenge. Even when one fell forward upon all fours, as now and then happened, the fierce wind and his own impetus bore him forward until, catlike, he had regained his feet without perceptible loss of speed.

Thus the race continued; then, in turning an island, the skater caught the glimmer of an almost imperceptible line of white blisters, or ice-bubbles, a hundred yards in front of him. There, he knew, was a streak of thin ice where a swift cross-current ran round the island bars. He had already avoided several such air-holes, but now he continued straight on.

He slackened his speed until a dozen or more of the Indians were almost upon him. These were gripping their knives for a final and desperate rush when the cunning skater darted aside at a sharp angle, avoiding the ice-bubbles by a dangerous margin.

The ice cracked under him, and St Xavier's heels actually broke through as Sandvig, quartering the wind in a mighty swoop, shot past the thin strip in a flight like that of a wheeling hawk.

The Indians saw their danger, but too late. In vain they flung themselves upon their faces or their backs in the hope to slide over the cracking ice. The foremost broke through in a twinkling, and one after another a dozen plumped into the widening breach, and floundered up to their armpits and necks in a freezing current.

St. Xavier shouted. Ole Sandvig too, stopped at a safe distance to get his breath, and then to indulge in a great Norse roar of laughter.

The pursuit was effectively checked The stalled Musquakies had, in fact hard enough work to save their lives. Sandvig and St. Xavier were a mile away when the last one was fished out over the bending, breaking ice.

The trappers reached Prairie du Chien that evening, and there Sandvig cut loose from his partnership with St Xavier. He declared he would have nothing further to do with such a venturesome fool.

"Nevertheless," Dousman was wont to add, "after Denis had moped about the fort for several months, like a love-sick and disappointed squaw, the two went off together again."—Youth's Companion.

## SOME IRON AND STEEL RIDDLES.

### Changes in Tensile Strength and Elasticity.

In view of our apparently extensive knowledge of the nature of iron and steel, it may seem strange to still speak about riddles wrought in these metals. Nevertheless, in everyday practice, we are constantly confronted by riddles of one kind or another when dealing with iron and steel, particularly the latter.

Why is it that we can raise the strength of soft staybolt iron of, say 47,000 pounds per square inch, to 60,000 pounds per square inch either by heat treatment or by repeated application of stress? Why is steel coming from the rolls or hammer weaker, and less ductile, than the same steel is after lying a day or two, or, better still, a week?

There is no doubt that many tons of suitable material have been either thrown out by the mill people themselves or were rejected by the inspectors because it failed to meet specifications, causing needless vexation and friction simply because neither the one nor the other of the parties knew that steel is in a disturbed physical state after rolling or hammering, no matter how good the material, and should be left to rest, the longer the better. Now, what takes place in the steel during the period of rest?

Another riddle is that we can raise the elastic limit and ultimate strength by a successive application of stresses very much above the original strength. What law, if it is a law, governs this phenomenon? Personally, the author is convinced that many errors of design or inherent weakness of the steel have been modified in their probable consequences, and breakdowns averted, by this peculiar property of steel to gain strength, if allowed to rest after having been subject to stresses within certain limits. It was the knowledge of this fact which enabled the author of fight for steel and defend steel for structural purposes at a time when that metal was not yet a favorite with the engineer by any means. We are all familiar with the discovery of cast iron getting stronger by tumbling in a tumbling barrel, but for all we know it is still an unsolved riddle what the conditions really are producing such effects.—Paul Kreuzpointner, in Cassier's Magazine.

### Colors and Smells.

A German botanist is said to have discovered that out of 4,300 species of flowers cultivated in Europe, only 420 possess an agreeable perfume. Flowers with white or cream-colored petals are more frequently odoriferous than others. Next in order come the yellow flowers, then the red, after them in blue, and finally the violet, of which only 13 varieties out of 303 give off a pleasing perfume. In the whole list 3,880 varieties are offensive in odor, and 2,300 have no perceptible smell, either good or bad.—Youth's Companion.

## GARDEN AND FARM

### CULTIVATION OF QUINCE TREES.

But few farms contain quince trees. One or two quince trees will be found valuable for a family. The quince tree is a great feeder and requires cultivation, as it soon shows the effects of neglect. In the markets there is seldom a full supply of quinces, and they bring good prices.

### ROUGH FEED FOR SHEEP.

Watch the feed racks and see that everything is eaten clean within two hours from feeding time. For rough feed the greater variety the better. Good clover hay is the best, and bright corn fodder next. Timothy cut when in early bloom is also excellent.

### BEST DIRECTION OF LABOR.

Farmers do not always devote their labor in the best direction. A garden may be expensive if not carefully attended to, as the weeds soon take possession. The receipts from a garden may also be less than the cost of the product, but the season, kind of crops grown and rainfall affect the results. There is one point in favor of a garden, however, which cannot be disregarded, which is that the farmer can never buy as good fruits and vegetables as he can grow. No vegetables shipped to the farm can possibly be as fresh as those taken from the garden and used immediately.

### VALUE OF DAIRY SCHOOLS.

The National Stockman publishes the following article: During one of the sessions of the convention at Fairmont, Minn., the discussion turned on the value of the dairy school, when back in the audience a gentleman arose and told this story: "I was out West, working in a creamery and earning $300 a year. With a wife and several children I had a hard time to get along. I was doing the best I could, but the butter did not always bring market price and I became somewhat discouraged. Finally I borrowed $50 and went to the Minnesota dairy school. There I learned everything within reach, and when I went out again I found a place at $60 a month, and whatever prosperity I have since had is due to the month that I spent at the dairy school." We think that this might be the history of others who have attended dairy schools in other States besides Minnesota. This man has since taken many prizes at State fairs and conventions, received the sweepstakes prize at the National Creamery Buttermakers' Association in Topeka, Kansas, in 1898, and the first prize at the Paris Exposition last summer. Not every one could do as well, but he had the determination to succeed, and only needed to be taught how to do it. One such case would repay the expense of many days of school.

### WATERING IN STABLES.

At a farmer's institute in Ontario one stock feeder said both milch cows and fattening stock should have water constantly by them in the barn. He usually watered from a tank twelve feet deep and twelve feet in diameter, filled by water from the roof, so arranged that they could have water when they pleased. By an accident to this tank he was obliged for a time to bring water from a spring and watered at regular hours, and while he could not estimate the loss to the fattening cattle, he knew that two milch cows fell off one-third in their milk as a result. His neighbor, also a feeder, thought it was necessary for the stock to be turned out every day for water and exercise. By keeping his cattle in the stable and water constantly within reach of them, he fatted his for market in six weeks less time than his neighbor, and sold them at 50 cents per hundred weight more than the neighbor received. We think he did not overestimate the importance of having water where they could drink when they wished to do so, and take it little and often, but we think some of the difference is due to the temperature of water in the tank and that from a spring or well. The supply from the tank would seldom reach below 60 degrees if it was properly made, while well or spring water is usually below 50 degrees, and if run into a trough may be much lower in cold weather.—American Cultivator.

### HOW TO MAKE A START.

It is time to decide which you will do, buy eggs of some pure breed or purchase a trio or more of birds, if you have not pure stock. There are advantages in either way of getting pure stock. Personally I prefer purchasing a trio or more of birds. The first cost of birds or eggs depends upon how many are purchased. From $10 worth of eggs one can hardly expect to have more than 24 pullets for next season, not so many choice ones, and probably six salable roosters. While the chicks will all be of an age, you may have them of an age from two or three hens, by saving the eggs until there are several dozens, and the hatching per cent. will doubtless be higher from one's own birds than from shipped eggs, if the birds and eggs are cared for properly.

From $10 worth of birds purchased last February I now have 28 very nice pullets, sold five roosters for breeding purposes, have five more on hand and also the original birds, except one which was stolen. The birds secured last February were fine young ones, and almost every egg hatched. I saved the eggs until I had enough to set under four hens and set all at once. The eggs were turned every other day, kept dark and cool and hatched vigorous chicks with few exceptions.

Examine the birds for lice as soon as received, also watch for symptoms of cold. Don't expect them to begin laying immediately; they will need some time to rest after January. Don't get them unless you can give them more than scrub care. When settings of eggs are received, let them rest 24 hours before placing under hens or in an incubator. The variety does not matter so much if you get good ones of the breed.—Emma Clearwaters, in New England Homestead.

### FEEDING BEES.

I have tried many ways of feeding bees, and have found none as good and practical as this. I have a frame or two of empty comb for the super of an empty top hive, and at evening, after the bees are about done flying, I remove the cover, take out the frame and fill the combs with syrup, honey, or whatever I choose to feed. By morning they will have it all carried below and stored away in the brood chamber, and outside bees will not know anything about it. By this method my bees get all the benefit of feeding at the entrance. You must shut your bees in in order to shut the robber bees out. I have had many bees drowned in the patent feeder. Under the plan described I have had no trouble from robbers taking the food prepared for the needy ones. I do not leave my bees shut up all day by forgetting to relieve them. When feeding at the entrance they will take the food when the weather will not permit them to fly out.—F. R. French, in the Epitomist.

### THE SAVING IN CATTLE FOODS.

The saving in cattle foods by the use of the whole stalks of corn, and the reduction of straw by cutting, has done more for farmers within the past ten years than any other system of feeding. The shredder cuts and tears the stalks, removing the ears at the same time. The hard outer covering of the stalks is torn, and cattle will not reject so much as formerly. The most important advantage in shredding the stalks is that as all portions are made fine they can be used in the stalls for bedding or thrown on the manure heap in a condition which renders them of great aid in preserving manure. Root cutters or pulpers are now so improved that but a few minutes are required to slice a bushel of carrots or turnips, even by hand, but where a farmer has tread power or a small gasoline engine a large amount of food can be prepared in a day. The rapidity with which food can be cut, and the fact that the work can be done in winter, under shelter, enables the farmer to keep more stock in proportion to the crops grown.

### SHORT AND USEFUL POINTS.

Whitewashing the poultry-house is seasonable at any time.

One of the best forms of economy on the farm is to protect the stock from the cold.

When the weather is cold scald the morning mash and feed it to the hens while warm.

Buckwheat or millet are not dear, as a rule, and the poultry are very fond of them.

Experience has plainly shown that clover is a most nutritious and desirable food for poultry.

Wheat bran is a material that can be fed to cows to an advantage during every month in the year.

Farmers who market anything should make it their business to find out the value of uniformity.

Unless it is intended that the dry cow be fattened, care should be taken not to feed any fattening food.

There is no longer any doubt as to whether a man owning ten or more cows should have a separator or not.

Don't turn a valuable colt over to anyone to train for you unless you are fully satisfied that he is a competent man.

Hogs should not be fed for twenty-four hours before slaughtering. When fed within this time they do not bleed freely.

Only the best of stock should be kept. No amount of feeding or care will make an inferior animal the equal of a good one.

Why don't the farmers raise a few Guinea hens? Their flesh makes excellent eating, and affords a variety in the poultry line.

It is much better to feed a cow every ounce of food that she can possibly take care of than to try and make your profit by cutting off on the feed bill.

As the cow's udder is a very delicate gland, the farmer should bestow great care and attention upon it. Might as well upset the milk pail as upset the udder.

The careful dairyman usually knows just about how much food each cow can eat and digest. There is no more money in giving stock food that they cannot use than there is in starving them.

Dry-picked poultry sells the best. When picked, let it lie until all the animal heat is out of it, and then pack in nice clean barrels or boxes. This is one of the many ways of getting good prices.

It is suggested as a preventative of lice that a piece of burlap sacking be tacked on the roosts and saturated with kerosene. This ought to work good, and should be of especial value during the summer months when lice are so troublesome.

# MURDEROUS FLOWERS.

## SOME ATROCITIES COMMITTED BY ATTRACTIVE PLANTS.

### The Treacherous Nature of the Arum Lily—Death Meted Out to Unhappy Flies by the Pitcher Plant—Criminals Executed by a Plant in China.

Professor Bottomley, in a recent lecture at the London Institution, mentioned the treacherous nature of the common arum lily, or cuckoo-pint, which, after attracting flies by entertaining them upon the sweet pollen stored in its interior, imprisons them for the purpose of fertilization, says the London Daily Mail. Sometimes when the flower withers the fly escapes alive, although intoxicated, but at others it dies in the clutch of the arum.

Death more certain is meted out to unhappy flies by the pitcher plant (Nephenthes Dormaniana), which offers to the insects a cool, refreshing drink, stored in the curious pitcher-shaped vessel which forms the bloom and gives the flower its name. Upon the invitation being accepted, the insect is drowned in the very liquid proffered to it as a beverage, and afterward assimilated into the substance of the flower. This feat is very well imitated by another plant called Dionea muscipula (fly-catcher), and both of these may be seen committing their atrocities "in full working order" at Kew.

For wiping out the fly family, however, Rafflesia Arnoldi has the biggest reputation. This plant has a large crimson blossom, giving off the odor of carrion flesh, a perfume irresistible to any fly of taste. In this apparently delightful spot the confiding female deposits its eggs, and goes on its way rejoicing, only to find on returning that the rafflesia has dissolved the lot. In this way a single bloom will destroy hundreds of thousands of embryo flies in a year.

A plant which kills men who have known it all their lives is one that is to be found in thousands of gardens throughout the United Kingdom. This is the variety of ordinary garden primula known as obconica, and many gardeners have met their deaths at its hands. When potting up this plant the experienced horticulturist usually wears gloves, for if there is the least scratch or thorn prick on the fingers, and one of the leaves of the primula should happen to touch it, blood-poisoning is almost always sure to follow. When erysipelas intervenes, which is by no means infrequently, it is usually fatal, as there appears to be no reliable cure for this disease when arising from such a cause.

That dozens of people die annually by indiscriminately eating berries and other things without any knowledge of their nature is, of course, a well-known fact, but where the plant itself aids by masquerading under false pretences they are not so much to blame. This is the case with the aconite, which in appearance and flavor very much resembles the horse-radish. Two women living in Bedford scraped and ate some of a root with their beef on New Year's Eve in the belief that they were partaking of horseradish. It turned out to be aconite, and they both died shortly afterward from the effects of the poison.

That the poppy will kill people who look at it seems rather a Munchausen-like statement to make, but it is, nevertheless, a true one. In Asiatic Turkey and adjacent districts many huge fields of this flower are cultivated for the manufacture of opium. In such quantities the blooms give off an odor which, although imperceptible to persons who are accustomed to it, is completely overpowering at first. So deadly is the odor that there are over 100 cases in which visitors to those poppy farms, who have stopped too long to admire, have succumbed to its stupefying powers and died within a very short time.

In some parts of southern China criminals are executed by a plant in a very curious way. One of the numerous species of bamboo to be found there grows very rapidly, often making as much growth as an inch an hour. Over one of these plants the victim is bound and left until the bamboo has sprung up and killed him by piercing his body, which is only a matter of a day or two.

In western Australia is a huge kind of outspread cactus, called the "cannibal tree," often twelve feet in height. This is said by travellers to have the power of dissolving men in the same way that a pitcher plant dissolves a fly. The extent of its powers has not yet been fully proved, but an unlucky dog, who was selected to undergo martyrdom in the cause of science, was completely assimilated.

### The Sewing Machine.

Elias Howe has perhaps gained more fame than falls to the lot of most inventors. His product was the sewing machine, which was patented in 1846. This was a simple affair hardly comparable to the complicated, delicately adjusted, marvellously efficient machine of to-day. The value of this invention may be seen from the fact that the cost of all sewn goods has been reduced ten-fold in consequence. The sewing-machine industry now produces 850,000 machines a year and gives employment in America alone to more than a hundred thousand persons.

It has its disadvantages—among others that it has ruined the health of many well-meaning and industrious women—but this is an aspect of the matter for which the machine's great inventor can hardly be blamed.—New York World.