

1—Stripping eggs from the females.  
4—Hauling the catch up on the wharf.

2—Drying the nets after a catch.  
5—“Joseph” pulling in the net.

3—Sorting the males and females.  
6—Starting out to set the net.

## With Uncle Sam's Fishermen— J. Olivier Curwood

**I**T IS not many years ago since all of the five Great Lakes were so thickly populated with fish that at certain seasons of the year countless thousands of them died of disease brought about by their overcrowding in the streams and shallow bays of the lakes. In those good old days, not twenty years ago, the author was a farmer lad living on a little farm whose acres stretched down to the sandy beach of Lake Erie, and it was not an extraordinary thing for this nine year old urchin to make a “catch” of more than he could carry, and that before breakfast. But all of that has changed. Each year has added a dozen or more new fisheries to the hundreds of old ones scattered along the lakes, until now the best fish have become so scarce that Uncle Sam has been compelled to establish fish hatcheries at convenient places in order to supply each year millions of artificially raised minnows to the natural stock in the waters.

Of all the finny tribes in the Great Lakes the whitefish is the most valuable, so when it became apparent that this species was threatened with extermination Uncle Sam began investigating the matter. The whole length of the great inland lakes was carefully examined, and it was finally determined to build the biggest whitefish hatchery in the world at Detroit, Michigan. Why Detroit was chosen instead of Chicago, Buffalo, Cleveland, or

“Goin’ t’ be a big ketch this mornin’!” said Cussy.

Although Cussy was down in black and white as Uncle Sam's oldest fisherman, and the only one among the lot who had not passed a civil service examination, he was ashamed of his name going abroad, and had it not been for a little confidence on the part of one of the rowers I probably would never have known the old man by any other appellation than that of “Cap'n Billy,” by which “the old cuss,” to quote one of his nicknames, is known at every place where whitefish are planted along the Great Lakes. Cap'n Billy is an old man, and he swears by everything that is sacred that his pipe is as old as he. He is grizzled and weather-beaten and as ignorant of the three R's as a South Sea Islander. The only reason why William Cussy annually pilots one of Uncle Sam's fishing expeditions, and that without having passed the civil service examination, is because from end to end of the lakes he is the only man yet discovered who can “smell” whitefish.

“It's goin’ t’ be a whale of a big ketch!” repeated Cap'n Billy, with some emphasis. “Th's millions of 'em under us, crowdin' thick. I can smell 'em!”

For a few minutes the rowers exerted themselves just enough to hold their own against the current, while Cap'n Billy strained his eyes to locate himself. The lights of Detroit were going out one by one as the mist lifted from the river, and soon Belle Isle

circling out into the river, and then turning gradually toward the shore again. Between the two forces the net was continually kept taut. As the shore came in view again, a small rowboat shot alongside, and a shore-line exactly like the one attached to Joseph's reel was handed from it to Cap'n Billy, who in a trice had fastened it to the oak spar of the other end of the net. This line was attached to the second reel at the fishery. As this brayl was tossed into the river Cap'n Billy put his hands trumpet-like to his mouth and shouted back through the fog:

“Brayl ho!”

Almost a quarter of a mile away we could hear the cracking of whips, the excited shouts of the drivers urging on Joseph and his less famous mate, and the noisy creaking of the reels. It is easily seen how the big net was now being drawn in toward the shore, in the form of a great arc. It reached down into the water forty feet, so all the fish, or the majority of them, that were inside the arc would be captured.

“Th' ain't be'n a day like this for three years!” said the old man gleefully, filling his pipe from a rubber pouch of tobacco. “I bots we takes a ton!”

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The day I spent with Uncle Sam's fishermen began cold and misty. Dawn had not yet begun to brighten the sky. The flickering lanterns of the fishermen twinkled here and there as they made the nets ready and harnessed a horse to each of the two big reels that pulled in the seines from the river. Then to "Joseph's" reel was fastened a rope some hundred fathoms long, the other end of which was firmly tied to one end of the huge net that was to be taken out into the river.

"A-jo-ah!"

Whatever the word meant it acted like magic. The gray December mist had hidden the shore line and everything but the glowing lanterns, but through it the beat of Joseph's hoofs as he wound up the slack rope, the creaking of the big reel, and the shuffling of rubber-coated men hurrying down to the river announced that the day of Uncle Sam's fishermen had come. Almost before the last echo of the cap'n's shout had died away across the river the long boat, with its great pile of net, had pulled out from the shore. A brisk wind was coming in from Lake St. Clair, bringing the chilling fog with it. The rain that had drizzled all night had ceased, but had left the air so cold and so uncomfortably damp that even the rowers continued to keep on their rubber suits.

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For a few minutes the rowers exerted themselves just enough to hold their own against the current, while Cap'n Billy strained his eyes to locate himself. The lights of Detroit were going out one by one as the mist lifted from the river, and soon Belle Isle began looming up, with the government's fishery faintly outlined against the dull gray of the woods. On the dock running a hundred feet out into the water a few shadowy figures could be distinguished, and beyond them standing out big and gaunt in the uncertain light, old Joseph, who has the honor of having pulled in more fish than any other horse in the world. When Joseph came into view Cap'n Billy began chanting "time," the boat surged ahead, and the day's work began in earnest.

I crept up beside Cap'n Billy on top of the big net. There were twenty thousand square feet of it, piled up in folds so that it would slip off into the river without tangling. To be exact, if stood up like a tennis net it would have been five hundred and fifty feet long and forty feet high. In his arms Cap'n Billy hugged the brayl, an oak spar which spreads the end of a net. From this brayl the shore-line stretched through the water to the reel, now almost three hundred fathoms away, where Joseph stood ready to begin winding at the word. Up to this time none of the net had been set, but when the shore-line had almost drawn taut Cap'n Billy gave a lunge and the big spar plunged into the river. At the same time Cap'n Billy roared something unintelligible to me, and as he shoved me head over heels into the bottom of the boat I had a momentary vision of Joseph as he began to slowly wind the reel.

"I didn't know you was there, sir, or I wouldn't throwed it," apologized the old man. "Likely as not you'd gone overboard wi' th' net if you hadn't got down quick."

A mystery was now unfolding itself before my eyes. I had often wondered how such a huge net could be set without becoming entangled. It was a simple matter to set pound nets out in the lake. But this was so different. Yet it was all clear to me in a few seconds. Imagine this great "tennis net" with its heavy spar piled up in the stern of the boat. As the first of the net slipped over Joseph and his reel began pulling it toward the shore, very slowly. At the same time the rowers redoubled their exertions,

forces the net was continually kept taut. As the shore came in view again, a small rowboat shot alongside, and a shore-line exactly like the one attached to Joseph's reel was handed from it to Cap'n Billy, who in a trice had fastened it to the oak spar of the other end of the net. This line was attached to the second reel at the fishery. As this brayl was tossed into the river Cap'n Billy put his hands trumpet-like to his mouth and shouted back through the fog:

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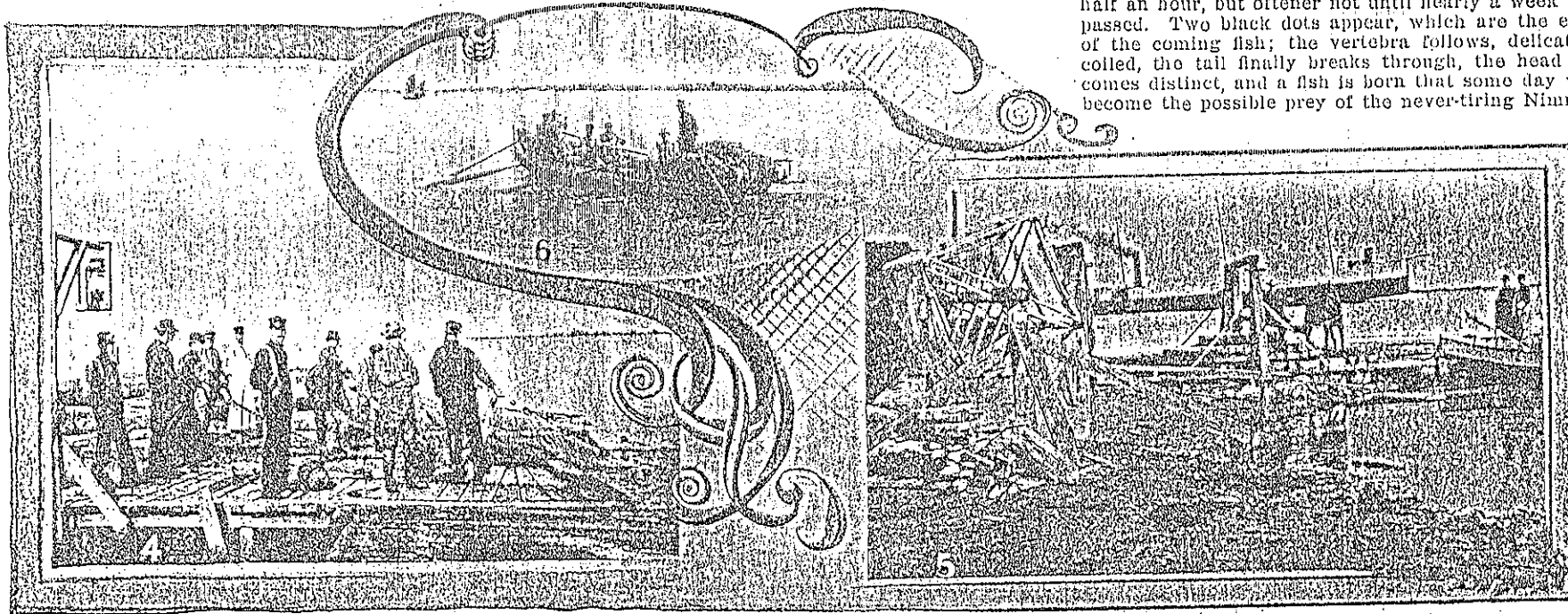
On shore, lanterns had been lighted and hung over the edge of the low wharf where the seine was to be dragged; but the mist and fog was clearing rapidly, and by six o'clock, when the net was half in, the day had fairly come. Faithfully old Joseph and his mate wound round and round at a dizzying jog, while men brought row upon row of crates and tubs, buttoned their rubber coats tight up about their necks, and then stood in anxious groups watching for the first sign of the incoming net.

As I stood with the others, Cap'n Billy came up beside me with a chuckle. "I never seen Josef pull quite so hard," he grinned; "I bets we takes a ton!"

Soon we could see little dashes of spray whitening the end of the brayls. The net was almost in. A moment more and a score of hands were dragging it out upon the slippery low wharf. Cap'n Billy chuckled, rubbed his hands, puffed his pipe, and when the first sight of the freight met his eyes, turned back with the rowers to get a cup of coffee.

As more and more of the net came in, men in rubber boots met the fish almost before they were out of the water, and disentangling them tossed them into long floating crates. These crates were sixteen feet in length, five feet wide and five feet deep, and no more than 300 whitefish were placed in each. Occasionally pickerel and big, slimy carp came up with the others, and were thrown back on the wharf. Once there was a shout almost at my elbow, and the water at our feet boiled under the lashing of an enormous sturgeon. It is an unwritten law that the steak of a sturgeon caught in the net shall be divided among the fishermen. Almost in less time than it takes to relate it, half a dozen gaffhooks had dragged him ashore. I afterward found he tipped the scales at 103 pounds—a pretty good size for the river.

I followed one of the crates as it was towed to the "strippers," and after a little Cap'n Billy joined me there. With a dip net the fish were taken from the crate singly, and barely touching it with his fingers an expert passed upon its gender. If a male it went into one tub; if a female, into another. A pipe was continually spurting fresh water into these tubs, and beside each sat a stripper, with two pans in front of him, and two other tubs awaiting the



half an hour, but oftener not until nearly a week has passed. Two black dots appear, which are the eyes of the coming fish; the vertebra follows, delicately coiled, the tail finally breaks through, the head becomes distinct, and a fish is born that some day will become the possible prey of the never-tiring Nimrod.

stripped fish. Cap'n Billy stood in front of one of these receptacles, and suddenly making a dive held up a large female for me to examine.

"He's green!" he explained, soberly.

I took the fish in my hands. It was big and handsome, and so firm and lively that it nearly flopped out into the little canal that led to the river.

"He's hard as a stun," said the old man, "an' green as grass!"

For a moment he peered into the tub again, made another dive, and handed me a somewhat smaller specimen than the other.

"Ho's ripe, sir!"

The fish was soft and flabby, and along its belly I could feel hundreds of tiny lumps like fine bird-shot. I returned it to Cap'n Billy, and he tossed it to the stripper, who in turn deftly tucked the head of the whitefish under his arm and ran his forefinger slowly along its belly. From the vent the ova exuded in a tiny stream.

"Twenty five thousand aigs fr' thet one fish, sir!" said Cap'n Billy with an air of triumph. "Reckonin' on them thet don't hatch, them as dies in transportation, an' them as is et by other fish before they grows old enough to take care of themselves, they'll be ten thousand good, eatable fish fr' them inside of two years." I looked askance at the stripper, who I knew had passed the Civil Service examination, but he nodded affirmatively.

"You see if we hadn't caught her, probably not an per cent of her eggs would have been fertilized by the male," he said. "Then her spawning ground in St. Clair might not have been a good feeding

ground, and of the ten thousand hatched all but a few would have starved; and the majority of the few remaining would have fallen a prey to other fish while very small. We figure that every good female will produce ten thousand matured fish if attended to by the Commission, while if allowed to pass to the spawning ground probably not a score would live for the fisherman of 1904."

For a time after that my stripper was too busy to talk. If you have ever seen a man with a countryside reputation as a corn husker showing you stunts in the cornfield, you have some idea of how whitefish come and go in the hands of a man who knows his business at stripping. Not until three quarts of eggs were in the pan before him did he cease his exertions for an instant, and then only to select one of the biggest and finest looking males he could fish from the tub. The mill was added to the eggs, the whole placed in a ten gallon can partly filled with water, thoroughly agitated, and in something less than seven minutes the stripper told me 3,000,000 eggs had been fertilized, and were ready for the hatchery.

A modest, unpretentious-looking frame building, in suitable environment easily mistaken for a country church, is the United States fish commission's hatchery at Detroit, the largest in the world. To this plant the eggs are carried, and placed in thousands of glass jars, through which water is continually flowing with brookside melody. To the bottom of each jar runs a tiny spigot, and the fresh stream coming from this keeps the eggs dancing until the millions of wriggling little creatures spring to life. The eggs begin to swell, sometimes within

He now begins to take his first lessons in swimming. This is the period when in his native element he would almost surely fall a prey to his voracious kin. But here week by week he develops, grows stronger, and finally begins taking a trip of exploration all his own. A tiny stream of water is always coming up under him. So, some winter day, he struggles over the top of a jar. He is now in a bigger and a new world. It is a big trough, with a stream of water flowing through it. Naturally the baby whitefish heads upstream, and every inch of the way he loses he gives up with a struggle. Then he comes to another trough in which the water is still deeper and swifter. Still struggling to make his way against the current, he is borne along, until with a little splash he shoots into a great, black tank, big enough and deep enough for boys to swim in. Here through all the long winter he grows larger and stronger, and when the first days of April come he is an inch or more in length, and so strong and active that it is pretty certain he will never make a meal for any other fish.

The fry in the Detroit hatchery are tiny fellows now, but in the spring there will be 450,000,000 lively minnows for Michigan waters alone, and many million others for plants all along the Great Lakes. These latter will be distributed by the splendid fish-car Attikumaig, which is fitted out with troughs and tanks similar to those at the hatchery. Some conception of the magnitude of the operations at the Detroit hatchery may be had when it is understood that nearly three hundred bushels of fish eggs will be hatched this winter.

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## An American Barony.

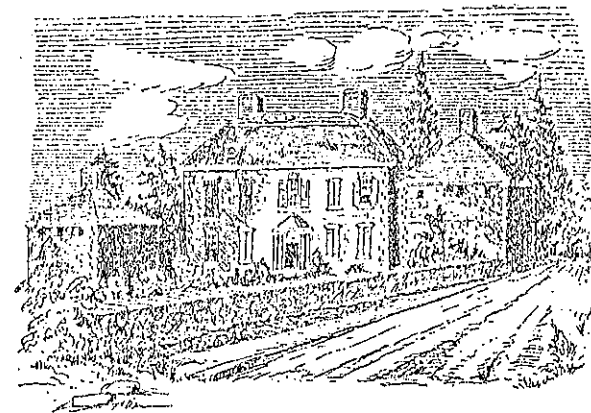


**J**OHNSON HALL, the only structure in all America which can rightfully claim the honor of being a genuine baronial castle, is still standing, about a mile from the village of Johnstown, north of the Mohawk river, in New York. The tract of land in the midst of which this fine old-time mansion was erected was given to Sir William Johnson by royal grant.

William Johnson came to America in 1738, to take charge of land belonging to his uncle,

Sir Peter Warren, in the region of the Mohawk Valley. He became a great favorite with the Indians, as he dealt honestly with them, learned their language, and conformed to their manners; indeed, in time he took Mary, a sister of Brant, a famous Mohawk chief, to his home as his wife. When the French and Indian war broke out he was made sole superintendent of Indian affairs, and his great influence kept the Six Nations from favoring the French. He attended grand councils of the Indians and was adopted into the Mohawk tribe and made a Sachem. In 1753 Johnson was appointed sole superintendent of the Six Nations, was created a major general, and led an expedition intended for the capture of Crown Point, then in possession of the French. In 1756 Johnson was knighted and the King gave him the appointment of superintendent of Indian affairs in the North. At the close of the French and Indian war the King gave him the tract of land referred to above, being one hundred thousand acres of land north of the Mohawk river. Its actual possession, however came about in a most peculiar

way. Sir William was a man of singular force of character and great resources. He set about his business of acquiring power and influence by a profuse and charming as well as most original hospitality. Among his guests on one occasion was a powerful sachem of the Mohawk tribe named Hendrik. Johnson had a very beautiful embroidered coat which the savage chief set his heart upon possessing. So one morning he announced in the usual solemn sedate style of the red man: "Brother, me dream last night."



JOHNSON HALL.

"Ah," answered Sir William, "and of what did my red brother dream?"

"Me dream," said the Mohawk laconically, "that the embroidered coat was mine."

"Surely dreams are from the Great Spirit, are they not?" said the baronet.

"Yes, oh, yes."

"All dreams?"

"Truly, all dreams."

"Then," said Sir William devoutly, "of course the

coat is yours; take it, my red brother—my gift from the Great Spirit."

The sachem never moved a muscle of his imperturbable face, but doubtless chuckled far within at the ease with which he had imposed upon the pale-face. But in the long run the impositions are not for the simple savage. Sir William bided his time, and when, not long after he returned the chief's visit, he, too, slept, and in his slumber dreamed, or professed to dream a dream.

"What did my pale-faced brother dream?" inquired Hendrik, not doubting that he would be called upon to repay the coat with some trifling gewgaw, but wholly unprepared for the astounding demand that followed.

Sir William had dreamed to some purpose, no less than that a certain broad tract of land—the bulk, in fact, of the best lands of all the Six Nations—should be given up to him, to him and his heirs forever.

The discomfited Indian was at first inclined to demur to this inequity.

"What," exclaimed Sir William, "are not dreams from the Great Spirit?"

The Mohawk lugubriously enough, supposed they were. "Then," said the wily baronet, "the land is mine."

The Indian sat in stolid silence for a while; then, rising majestically, he answered: "Yes, brother, the land is yours, but you must have no more such dreams."

It was in the center of this great domain, thousands upon thousands of acres, that Johnson reared his stately palace, by far the finest and most lordly residence of colonial times—at least, north of Mason's and Dixon's line. The main building was of wood, while upon either flank—in what military men call "defensive relations"—were two block houses solidly constructed of stone and pierced with port-holes for guns.

The tales of what went on in this baronial hall, as handed down by tradition in the neighborhood, are worthy or rather unworthy of romance.