

STRANGE NEW FISH THROUGH THE DRAINAGE CANAL

NATURE'S LAWS DIVERSIFIED BY MINGLING OF WATERS OF LAKE AND RIVER

Rewrite the ichthyology of America. Insert under the headings denoting the different species many new varieties unknown to former piscatorial lore. Add new subgenera and change the formation of varieties. For a great transformation in the fifth class of vertebrate animals has resulted from the digging of the Chicago drainage canal and the commingling of the lake's waters with those of the rivers. The digging of the channel across the great divide that once separated Lake Michigan from the Mississippi Valley has let the lake fish into the Des Plaines, the Illinois and the Mississippi rivers. The seeming unnatural commingling of waters has produced fishes that seem unnatural—that is, when compared to our present standards. New forms, new varieties, new types have appeared, differing in color, habits and general description from any other known to the American pisciculturist. Coexistent with the appearance of the new kinds of fishes there is noted a most remarkable increase generally in the number of the finny inhabitants of the Des Plaines and Illinois rivers. The Des Plaines River fairly swarms with fishes, and fishermen are reaping a harvest such as their fondest fancy never pictured in former times. All along the canal, and the Chicago River, and far down the Illinois River, the same conditions are noted to a greater or less extent. Ichthyologists have marvelled at the seeming phenomena, and from all sections of the country scientists are coming to study the conditions, to make note of the new forms and record them in the new history of American fishes, which now must undergo a complete revision. True, many dead fishes have appeared in the rivers, but all such show marks of violence and no evidence of disease. It is evident that a great warfare is going on among them over which families and species shall have the best right to make the river their future home.

With the increase in the number of the river fishes, there appears to be a corresponding increase in the number of Lake Michigan fishes. At least, all the lake fishermen are complaining, and the assertion is freely made that the lake's finny tribe are being emptied through the canal into the rivers beyond the Chicago divide. Formerly this divide formed a wall thirty miles wide between the lake and the river fishes, and the types inhabiting the two waters, generally speaking, were entirely separated and distinct. But when the canal was dug across the divide and the Chicago River was turned upside down, and instead of flowing into the lake was made to become an outlet of the lake and empty the lake's waters into the canal and thence into the Des Plaines and on into the Mississippi River near St. Louis, the lake's fishes have gone with the outflowing waters into the rivers, there to join the river fishes and compete with them in the struggle for existence. Thousands of these fishes, while being hurried on with the current, have been noted with the naked eye by boatmen and people standing on the banks of the river and canal. Sometimes the water seemed to be fairly alive with them, and fishermen, unable to resist the temptation, have defied the law, and, in nets, have hauled them to the shore in wagon loads. Lake trout and perch, never before caught outside of the lakes, have been brought to shore by thousands all along the canal and the Chicago and Des Plaines rivers. Lake herring, cisco grayling, chubs, lake trout, white fish and numerous other fishes, heretofore regarded as exclusive inhabitants of the great lakes, now swarm in the waters beyond the Chicago divide. White bass, pickerel and muscullunge have been found in goodly numbers, and two specimens of the Michigan grayling, heretofore found only in Lake Michigan and in the waters of Michigan State, have been caught.

Once they have crossed the bear-trap dam at Lockport, there is no way for any of these great swarms of fish to return to Lake Michigan, and they must make their home in the rivers beyond and fight for supremacy with the old inhabitants of these waters. It is probable that the conflict which will result in the survival of the fittest, will cause a weeding out of many of the types now abounding, and some of the river fish and some of the invaders from the lake will undoubtedly become annihilated. Indications are, however, that the general result will be most beneficial to the lake fisheries. The infusion of new blood into the old river stock already seems to have added new life to the waters, and hence, while the fishes are fighting for supremacy, they are multiplying enormously, and the splendid specimens of all the varieties this season show that the health and general physical condition have been greatly improved. The fish feed upon each other, and it appears that none of the deaths have resulted from other causes than violence. The season has afforded unprecedented sport for those searching for game fish. Old-time

sportsmen have turned their attention from the northern lakes to the Illinois rivers and neighboring lakes. For the small lakes all along the rivers show the same wonderful increase in piscatorial population.

Complaints of the alleged effects on Lake Michigan fisheries at first were ridiculed by the drainage canal trustees, but they have become so numerous that these officials have been forced to take cognizance of them. The river's gain is Lake Michigan's loss, it is declared, and how to prevent the exodus of lake fish is a problem that the sanitary trustees are now wrestling with. So far, the only solution of the problem that has been suggested is the building of fishways at all the dams and locks along the artificial water route. But this, it is feared, would weaken the dams, and it is doubtful if it would be possible to construct them in a manner that would permit the fish to make their way back to Lake Michigan, once they had wandered so far away as the Illinois River. Two methods of constructing the fishways have been proposed—one consisting of what is known as a fish ladder, which would consist of a series of steps, over which the water in descending would turn the fish to climb back to Lake Michigan, the other comprising a chute with a sinuous track for diminishing the velocity and assisting the passage of the fish to the level above the dam. Because of the nature of the locks and dams, their width and number, it is doubted if this device would prove successful, even if the construction did not interfere so materially with the mechanical operations.

The appearance of the new types of fish, entirely different from anything recorded by former naturalists, has stirred up the scientists, and the heretofore despised Des Plaines River has come into prominence as the center of piscatorial interest, for it is here that the new types and increased number of fishes have attracted widespread attention.

HOW TO REDUCE THE FLESH.

Increasing the Lung Capacity is the First Requisite.

To increase the lung capacity is the first step in the reduction of flesh, says Outing. For this purpose running is, I think, superior to any other exercise. Boxing and handball are also excellent for the "wind." And these exercises will do more to increase the respiratory functions; they will greatly stimulate the circulation as well as all the secretory and excretory processes. What leg exercise will not do, however, is oxidize, to any great extent, the soft tissues of the trunk and arms. True, by stimulating the organs of elimination and by increasing lung capacity, leg exercises will oxidize upper tissues somewhat; but when fat is not replaced by muscle, it has a strong tendency to reform.

A bad effect of leg exercises exclusively is that they draw a major part of the blood, rich in oxygen, to the low-

er limbs; whereas if vigorous arm and trunk exercises were executed, beside the leg exercises, much blood would be attracted also to the upper parts which would then be oxidized to the best advantage, their fat being, at the same time, replaced by solid tissue, and hence having little tendency to reform. Running, therefore, splendid exercise though it is, should be supplemented by vigorous "upper" exercises. By vigorous upper exercises I do not mean callisthenics nor any kind of so-called light exercises; I mean reasonably hard work.

NEEDLEWORK FOR SCHOOLGIRLS.

Benefits of Learning How to Sew Skillfully and Correctly.

The ability of a girl to do without teaching anything she is called on to do is pretty generally taken for granted. She imitates the countryman who, being asked if he could play the violin, replied, "I guess so; I never tried." Thousands of girls marry and set up housekeeping whose experience in cooking consists in making "fudge" and concocting a Welsh rabbit on a chafing-dish—pleasant eating in their place, but inadequate for the daily food of a hard-working husband.

So, also, the girl is supposed to know by instinct how to mend and sew. A certain young wife became on her marriage the stepmother of three small children. The first week's mending-basket was a revelation to her of her own helplessness.

"I was tempted to stop the holes with court-plaster," she confessed afterward, "and I dare say it would have been as effective as what I managed to do."

Two generations ago in a famous school for girls in an Eastern city sewing was an important part of the curriculum. The first task of a new student was the making of a shirt for father or brother. Every stitch in that shirt was set by a thread. If a seam had to be ripped a dozen times, it must be fit for the closest inspection. This zeal on the part of the school was sometimes excelled in the home.

A tradition lingers in one family of a daughter who went to that school when she was 6 years old. So well did she sew at that age that she was excused from making the shirt, and set at once to a bit of fine needlework—a wide muslin collar, covered with embroidery as exquisite as lace.

The promise of the 6-year-old child was richly fulfilled, and her needle was for a long lifetime a high satisfaction to herself and a joy to her fortunate family and friends. Sewing was never a slavery to her, but always a fascinating creative occupation. The patch on a jacket, the darn of a stocking or the embroidery of a gown or a napkin were alike welcome calls upon her capable fingers. When people spoke of her ability to turn off sewing, she used to say:

"That's because I know how to sew. I know how because I was taught. Skillful hands, even better than many hands, make light work!"—Youth's Companion.

Something Like Joshua.

A mountaineer of one of the back counties of North Carolina was arraigned with several others for illicit distilling. "Defendant," asked the court, "what is your name?"

"Joshua," was the reply.

"Are you the man who made the sun stand still?"

Quick as a flash came the answer: "No, sir; I am the man who made the moonshine."—Harper's Weekly.

The Fun of It.

"Why did you do that?" demanded the teacher.

"Oh, just for fun," replied Tommy.

"But didn't you know it was against the rules?"

"Sure! Dat's where de fun comes in."—Philadelphia Press.

The rich man and the mule are abused a great deal, but there continues to be a good demand for both.

THE SAME OLD STORY.



—Cincinnati Post.

Saying What You Believe.



JULIET V. STRAUSS.

I have never regarded my opinions as having any special weight in the community. Indeed, I have acquired the freedom of speech which characterizes me through a knowledge that people are not going to pay any attention to what I say.

This began in childhood, when I soon learned that my elders were obliged to apologize for me to the neighbors upon the broad grounds that nobody could be held responsible for my remarks because there was never any telling what I was going to say. I never did quite learn to avoid expressing sentiments until somebody else had expressed them and found they were safe.

I always did, from earliest childhood, when I sat listening to the safe and sane conversation of the visiting neighbors who were discussing platitudes in their company tone, get dreadfully tired of tried and true sentiment and break out with some mutinous idea or disturbing question that fell like a bombshell in the camp of the ultra-respectable Christian family of which I was an unworthy member.

In view of the number of times I was snubbed and punished for this, it would seem that I might have broken myself of the habit; but no, it stuck with me, and so, late in life, when I became a member of the community, a householder, a person of affairs, I was still regarded as a dangerous individual for strangers to meet, because, though I might conduct myself properly and talk intelligently, I was quite as likely to say something unlike what any one else ever said, and thus cause the impression that there was something queer about our town.

Well do I remember numerous vigorous endeavors on the part of safe and sane people to understand that I wasn't to be taken account of when it came to summing up the cultured people of the place, and that they were never on any account to take notice of anything I said. This left me free to say things, because if nobody was going to notice them one might just as well experience the relief of getting rid of a lot of bottled up sentiment that seemed anxious to get out. So I just said them.

I said that I didn't think much of woman's rights; that I thought the new woman was a fake. I said I thought society a joke and the affectations of fashionable women disgusting. I said I believed culture to be stupid when consciously applied.

I said women had run to seed in niceness. I said kindergarten work taught children to be affected and insincere. I said I was opposed to young people's religious meetings unless conducted by older people. I said I was opposed to lesson leaves; that I did not like audible prayer, except as read in a formal service. I said I was opposed to revival meetings.

This does not start the things that I said, but as nobody paid any attention to them, it did not really make any difference. But long years of saying things with impunity and not being actually run out of town, or muzzled by order of the city fathers, has emboldened me, and I may really do some damage before it is over.

However, in late years people have taken to looking with favor upon my open expressions of opinion, and I really believe it pays in the long run to hold to your own ideas in spite of the efforts of society in general to "farm" you. Young people are likely to mistake bluntness for frankness, and sarcasm for brightness. These mistakes it is well to avoid, but if you have an idea—a real belief, an instinctive objection to some popular theory, stick to it, for the world is always coming to grief by stupidity following "popular thought."

—Juliet V. Strauss, in the Chicago Journal.

HOW TO GROW HAIR.

Former Naval Surgeon Has Novel Plan to Retatch Bald Pates.

Breathe properly, and you'll never be bald. If you're already partially bald, breathe properly and your hair will start "coming in" again. This is the boiled down advice of Dr. Delos L. Parker, a former United States naval surgeon.

Parker came to the above conclusion by a series of experiments. He imprisoned a quantity of expired breath in a



DR. DELOS L. PARKER.

jar containing a few drops of water, and kept it in a warm room. A week or ten days later he injected a quantity of the liquid left in the bottom of the jar into a pigeon and awaited developments. Presently the pigeon's feathers began to fall out. He continued the injections regularly, and within a few days the bird's coat had entirely disappeared. When the injections were discontinued the pigeon regained its coat. The experiments were repeated with dogs and hens, and the results were the same.

Dr. Parker reached the conclusion that expired air, remaining in a man's lungs long enough for the decomposition of the organic matter to take place, resulted in the formation of a poison which affected the roots of the hair and caused it to fall out. Deep breathing expels the air and with it the poison.

The doctor secured a number of partially bald men and got them to breathe by proper methods. In a few days the dandruff, which is invariably an accompaniment to baldness, ceased; the hair stopped falling out and a new growth started. In six weeks the improvement was very noticeable.

TASK FOR MONEY EXPERTS.

Days 'Twould Require to Count Fortunes of Big Millionaires.

If the wealth of the rich men of the United States could be reduced to national bank notes it would not be as great a task for the nineteen expert money counters of the United States treasury to tally and set the amount down in books as the average man thinks it would. Working in the leisurely fashion the government permits, it would take the nineteen experts a little more than fifty-two days to ascertain the exact number of Rockefeller's dollars. Assuming that Weyer-

BLIND MAN WILL BE SENATOR.

The Democrats of Oklahoma have selected as one of the United States Senators to represent Oklahoma, Thomas P. Gore, of Lawton, who is totally blind. His nomination is equal to an election. This is the first time in the history of the United States that a blind man has ever been sent to the Senate, as Mr. Gore will be when statehood is accomplished under the present proposed constitution.

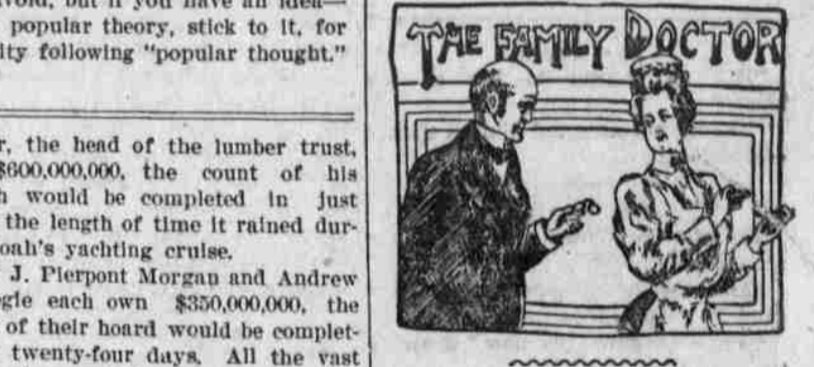
Mr. Gore has been in politics all his life, beginning as a page in the Mississippi Senate when he was but 11



THOMAS P. GORE.

years old. It was during that time that he lost his eyesight by an accident with an arrow gun. Three years previously he had lost his left eye, a playmate, in a moment of passion, striking him with a stone.

Mr. Gore is but 36 years of age. He lives at Lawton, has a wife and four children, and is a lawyer by profession. His memory is a wonder. When his father prepared to send him to a blind school, he refused to go, saying that schools for the blind did not furnish him the books and opportunity he desired. So he went to the public schools and college, getting through by reason of his acute memory.



Watery Eyes.—Relief may be obtained by bathing the eyes several times a day with a wash consisting of ten grains of pure borax and two ounces of camphor water.

Rheumatic Knee.—Try salicylate of soda, five drams; tincture of nux vomica, three drams, and essence of peppermint enough to make four ounces. The dose for an adult is one teaspoonful every two or three hours.

Superfuous Hair.—A growth of hair is annoying to a girl who wears short sleeves. Depilatories are dangerous and electrolysis, the only sure cure, is an expensive treatment. To minimize the trouble dark hairs may be bleached. Wash the arms with a weak solution of ammonia and water. Then pour a little peroxide of hydrogen in the water and apply with a piece of linen. The bleaching process will have to be repeated from time to time, but peroxide is harmless to the skin.

Nasal Catarrh.—In the treatment of this persistent and often intractable disorder, good results have been obtained by the internal administration five or six times each day of one-half teaspoonful doses in one-half ounce of water of a mixture of one ounce of specific eubine and two ounces of stillingia. The latter intensifies the action of eubine in its influence upon the mucous surfaces. Tincture of gelsemium, two drops every hour during the day, pushed to a physiological point, will abort a catarrhal cold. Three grains of salicylate of strontium, added to each dose, reinforces it if rheumatism is suspected.

Neuralgia.—If the neuralgia is in the right side of the face the left hand should be placed in a basin of water as hot as can be borne; or if neuralgia is in the left side of the face, then the right hand should be placed in the hot water. It is asserted that in this way relief may be obtained in less than five minutes. The two nerves which have the greatest number of tactile endings are the fifth and the medium nerves. As the fibers of these two nerves cross any impulse conveyed to the left hand will affect the right side of the face, or if applied to the right hand will affect the left side of the face. This is on account of the crossing of the cords.

No Way of Judging.

"What are the running expenses of your army?" asked one South American ruler of another.

"Oh, I don't know," replied the one addressed. "The army hasn't had a chance to run for a long time now."—Yonkers Statesman.

If a man prefers chewing tobacco to smoking, he always says chewing isn't so injurious to the health.

If any one gives you more than he gets in return, rest assured it is counterfeited.