

WHAT CONSTITUTES LABOR

The Man Who Employs His Brains as Capital as Much as a Laborer as Any Other.

The little daughter of one of New York's best known bankers sat in his study one day waiting for him to get through with his business, in order that she might see her home. That evening she related her experience to her mother, says the Wall Street Journal.

"Why, mamma," she said, "papa doesn't work. He simply sits at a desk and talks all day."

One may smile at the simplicity of this child, and yet a great many grown-up people in this world take exactly the same view she did. They think that all work or to use the word now universally though wrongly adopted, all "labor" worth considering is that done with the hands.

We speak of "capital" and "labor" as producing the wealth of the country. It is from use of these terms that much of the misconceptions, misunderstandings and mistakes that cause that perplexing of issues, "the labor question" springs. All wealth consists of the gifts of nature, the products of the soil, the mines and the air, and of all the "labor" of man in gathering, transporting and adopting these gifts to human use. Capital is simply labor stored up, saved, accumulated.

It is a favorite theory of socialists that while the basis of all wealth is labor, there is, under the present economic system, a surplus value, which, while really belonging to the laborer, has been wrongfully seized by the capitalists, thus creating the great inequalities in individual wealth.

But this theory depends upon the idea that it is manual labor alone that creates wealth. At any rate it takes very little account of any other kind of labor. The banker who sits at his desk and "talks" and the railroad president who rides in his private car over his "system" are not "laboring." They are "capitalists" who are simply existing on the labor of others. It is not too much to say that back of much of the agitation which is arraying the laborer against the employer, and the poor against the rich, lies this absurd fancy that the only labor that produces anything of value is that done with the hands.

World consists of the ignorant laborer who toil at a wage that provides for a mere subsistence, and the "capitalist," the man who lives by the labor of others, and who gets all the surplus value after the wages are paid.

BASEBALL - CURVE SCIENCE

Motion Imparted to the Ball Aided For on Basis of Scientific Reasoning.

Writers who discourse on modern progress tell us about the astonishing advances in bacteriology in surgery, in pathology, in the application of scientific knowledge to chemistry, and in a host of other things, but the ordinary baseball crank of this day and generation would be rather astonished if the fact were brought to his attention that it is only 32 years since the subject of baseball curves was first discussed. At that time, says the Philadelphia Ledger, scientists were inclined to scoff at baseball curves. The discussion in the light of our experience and of present universal knowledge is rather amusing.

The ball does not curve, says a student said; it only appears to curve; but at length tests were made. A side board was placed just where the batter stands, directly over the plate, and at right angles to the pitcher. A straight line was then drawn from the place where the ball left the pitcher's hands, right through the middle of the board and on a point back of the board where the catcher stands. The curve artist's then threw the ball with the twist, and lo! behold! the ball actually went around the board and over the spot, or even further, around a string suspended over the end of that straight line back of the board.

The curve of the baseball is now no longer open to doubt; but the question with the scientific inquirer is, Why does it curve? And this question the Scientific American answers. The pitcher in the field tells us that the ball curves, because he gives it a twist, but scientifically this will not do. Why will the twist make the curve? If a ball were thrown in a certain direction, and if the force of gravitation were not at work, the ball would continue in a straight line forever. Some force of resistance is then at work when a ball is made to deviate in a curve from its straight course. If a feather is dropped in a vacuum—in an exhausted receiver of an air pump—it will drop like a shot; but if it is dropped in the air, it will go down irregularly and slowly, shifting from side to side.

It is the atmosphere which causes the ball to curve. Bearing in mind that the atmosphere is a compressible elastic fluid, we find that when the hand of the pitcher with a rapid, rotary motion it "impinges upon a continuous elastic cushion, and this elastic resistance, or friction, changes its course in the direction which is given to the rotary motion. Take an out-thrust of a right-handed pitcher for instance. He impresses upon the ball a rapid centrifugal rotary motion to the left, and the ball goes to the left because the atmosphere compressible and elastic is nacked into an elastic cushion just ahead of the ball by the swift forward and rotary motion, and the friction, which is very great in front of the ball, steers it in the direction which it is turning.

JAPAN'S "HUMAN HORSES."
Coolies Who Draw the "Rickshaws" Which Convey Travelers About the Country.

The tests of which the Japanese rickshawmen are capable are almost incredible. I remember, one year ago, says a London Mail writer, being driven in a rickshaw in the island sea during a typhoon. It was far beyond the limits which are known, and for several hours we were obliged to travel outside these limits without special passports. But the master of the nearest fishing village was 100 yards off. He promised to supply the best rickshawmen which the neighborhood could produce, so as to take us to a railway station some 40 miles away. And he kept his word, for the distance was covered in less than six hours, including a half for refreshments. Each rickshaw was drawn by two men tandem wise, the usual fashion when long distances have to be covered. The leaders in each went through the whole distance, while the wheelers, so to speak, were changed half way. The road was over a great part of the distance little better than a mountain track, and it was raining most of the time; but there was never a break in our progress except to allow the coolies to take off or put on their clothes. They prefer running in nothing but a loin cloth, and do so whenever they get safely beyond the eye of the police, who have orders strictly to administer the law against nudity.

The fare paid for this prolonged journey was, if I remember rightly, about three shillings for each rickshaw, the extra shilling being a gratuity thrown in for good service. I know that it purchased so many blessings on my honor-able head, as cannot yet be quite exhausted. And having made our farewells at the railway station the coolies started back at once for their own village.

THE DEAD OF ASSYRIA

Few Traces of Sepulture of the Ancient People Can Be Found in That Country.

It is a curious fact that in Assyria the ruins speak to us only of the living, and that of the dead there are no traces whatever. One might think people never died there at all, writes Z. A. Ragozin, in the Egyptian Review. It is well known that all nations have bestowed as much care on the interment of their dead as on the enjoyment of their last resting place. In the construction of their dwellings—many, some even more, for instance, the Egyptians. To this loving veneration for the dead history owes half its discoveries; indeed, we should have almost no reliable information at all on the very early races, who lived before the invention of writing, were it not for their tombs and the things we find in them. It is very strange, therefore, that nothing of the kind should be found in Assyria, a country which stood high in culture. For the sepulchres which are found in such numbers in some mounds down to a certain depth, belong, as is shown by their very position, to later races, mostly even to the modern Turks and Arabs. This peculiarity is so puzzling that scholars almost incline to suppose that the Assyrians either made away with their dead in some manner unknown to us or else took them somewhere to bury. The latter conjecture, though not entirely devoid of foundation, is unsupported by any positive facts and therefore was never seriously discussed. The question is simply left open until something happens to shed light on it.

THE POLICEMEN OF JAPAN.

Are Recruited From Among the Samurai and Are Above Corruption.

A Japanese policeman seldom has much trouble in making an arrest. He is invested with all the majesty of the law, and to the Japanese he is supreme, says the Family Herald. It seems very peculiar to see him holding a solemn court in the street to settle some dispute between the inhabitants. The surrounding crowd shows no disposition to ridicule and banter, with the utmost gravity he examines the parties interested, notes down the information given and then proceeds to his decision, which is generally obeyed without question. This absolutism strikes the foreigner all the more because the policemen are usually young, five feet two to the standard height and 21 the minimum age for entrance into the force. Every policeman receives minute instructions as to his deportment, the position of his hands, when standing, when sitting, etc., and he must not be more than two inches in front or seven-eighths of an inch on the neck. The police are for the most part recruited from the old Samurai, and they appear to carry out the code of honor handed down to them from generation to generation. They are an intelligent, determined and rigorous set of men, well disciplined, and said to be above corruption.

INDIAN GAME-HEN'S EGGS.
They Always Bring Big Prices Because of Purity of Blood and Pedigree.

Not often does the price of a single egg reach \$100, but this is what was offered for each of the eggs of a certain Indian game hen, which was brought to England some time ago, says Country Life in America. For centuries, the Indian game, or Aztec fowls, have been the very apex of the game-bird, for the purposes of blood and pedigree have been most carefully preserved for so long that the date of the origin of the race has been lost in the past. It is almost impossible to procure specimens of the purest blood, for they are treasured by the Indian sportsmen at the highest value, and the best fowls are not allowed to go out of their native country.

As game-fowls they are great fighters. Those who have seen them in fight—for the finest birds never reach our colder climates—will of their prowess and unquenchable tenacity in battle. With them it is always victory or death. In America, however, the game-fowls are seldom raised for fighting purposes, but for show and as pets and hobbies of poultry fanciers.

What She Said.
"George, dear," she said, with a blush, "do you know that Mr. Simpson asked me last night to be his wife?"
"Well, I'm his impudent!" The idea of proposing to an engaged young lady? What did you say to him?"
"I told him that I was very sorry indeed, but he was too late"—Tid Bits.

Sudden Changes.
"Why, Kate!" exclaimed the fashionable mother, "I really believe my own baby don't know me!"
"No, mamma," replied the maid, "I certainly don't. I don't think she ever saw you with your hair that way."—Youth's Statesman.

POISON GLANDS OF SNAKES

Perform the Functions of Both Liver and Kidney in the Reptiles.

The first snakes chosen were two vipers whose poison glands I extirpated, this operation being easily performed with but little loss of blood, says a writer in Public Opinion. After the operation the reptiles did not seem depressed and moved quickly upon being excited, but 12 hours later they became torpid, and the death of the vipers resulted, one in 36 and the other in 48 hours. At the autopsy nothing special was observed except that the heart was dilated, but we may conclude from a subsequent experiments that the poison glands of the snake not only take the place of the salivary gland of the superior vertebrates, but are also designed to free the organism from poisonous products. Another point of view here presented itself to me, and that was whether the poison glands, similarly to the liver and kidneys, did not possess an internal secretion destined to neutralize the poisonous circulating substances.

In order to see if such was the case, instead of extirpating the gland I prevented the excretion of poison by putting the excretory canal, with the result that the two vipers operated upon died, one after four days and the other a few days later. The glands examined microscopically indicated that they were undergoing cystic degeneration. From these facts one may conclude that the glands have the function of organs designed to rid the organism of the poisons which are accumulated in it, and that in consequence of the destruction of these glands the animals necessarily die.

Two other facts now came under my observation—that the snakes digest with extreme slowness, and that intense fermentation takes place in the intestinal tube. This having been ascertained, the next question was whether any relation between the state of slowness and fullness of the digestive tube and the degree of poisoning. The pursuit of this question developed the following facts: 1. Vipers which are regularly fed produce a quantity of poisonous matter in a short time, the poisoning of such poison never being exhausted. 2. Vipers submitted to complete fasts after the removal of poisons in the glands has been exhausted are no longer dangerous. From these experiments it may be concluded that there is a constant relation between the state of inanition and the degree of toxicity of the fluid, the toxicity of the fluid being in inverse ratio to the state of inanition. This fact may be interpreted in two ways: 1. The gland being an organ destined to liberate the organism from products coming in great part from the digestive tube, every time this tube is emptied with the result that the poisonous substances are not produced, the gland does not eliminate the poison. 2. One may suppose that the poison is manufactured directly by the glandular epithelium, and consequently there is wanting the natural stimulus, and therefore the gland does not secrete any more poison.

Another point now presented itself, namely, to see if the toxicity of the fluid was modified in cases where the vipers were fed on easily digested food. I chose milk for this purpose, and from the results of my experiments it may be concluded that the poison is less intense under milk diet, though some to be harmfulness is not excluded as a modified product of abnormal fermentations. In conclusion it may be said that the snake's poison glands have a double function, to that of the kidneys, that is, to free the body from various substances in the blood, and of liberating the process of digestion, that is of the special animal structure of the secretory digestive organs. Further these products undergo in the glands new modifications which cause them to lose certain physico-chemical characteristics and to acquire others.

Plant Societies.
In a lecture before the St. Louis Academy of Science Prof. W. L. Ellsberry showed that the science of botany has been greatly advanced by the development of what may be called the sociology of plants, that is, the study of their relations to one another, as well as their adjustments to surroundings. Botanists recognize that plants are not scattered haphazard over the globe, but are organized into definite communities. A pond has its plant society, all the members of which fall into their proper places. A swamp forest consists of trees possessing a certain social relationship, and differing from those that form a forest on dry land. There is progression from one social organization of plants to another. A lily-pond may give place to a swamp-wood, this to a society of swamp shrubs, and this again to a swamp forest of tamarack, pine and hemlock. So societies of plants on dry land succeed one another as the conditions change.

Russian Girls.
In the minds of the majority of Americans Russia is associated with tyranny and despotism, yet there are said to be more points in common between the Russian and the English-speaking girl, than the girl of any other nation. The Russian girl asserts herself, and if her wish is to learn or to lose an independent life, in that respect she is an idealist. In this point being different from her English-speaking sisters.

In the Abeyance.
"What a cute little baby," exclaimed the good-hearted old lady on the street.
"Boy or girl?"
"We ain't decided yet," replied the little nurse. "Pop an' mom's still scrapping over a name for it."—Catholic Standard and Times.

CITY CHANGES BIRDS' WAYS

City and Country Sparrows Unlike in Their Early Morning Habits and Actions.

A man who lives a half-hour's journey by trolley out in New Jersey has recently had occasion to sleep for several days at the house of a friend in a street near Central park, in this city, says the New York Sun. His business keeps him out of bed every night until four o'clock, so he has had an interesting opportunity to compare the early morning habits of city and suburban sparrows. They are altogether different, he says. The country sparrows wake up some time after daylight breaks. First of all a single drabby chirp is heard. Then a louder one from the same voice. The early bird repeats his note with growing insistence until in perhaps half a minute an answering chirp comes from another tree. Then the two keep up chirp-chirping until in a few seconds another and another join in, and finally a minute and a half from the first call the air is full of the music. Then one fellow hops out of his nest on a twig and plumes his feathers. Another follows suit, and the leaves shake as the little creatures hop about. It is some minutes before they begin flitting to the ground in search of their morning meal.

But once started they are in for a busy time of it, and if they ever stop chirping or feeding or flitting to and fro before evening falls, the man hasn't discovered the period. The first chirp from a New York sparrow is heard often as early as three o'clock, before there is a ray of light in the eastern sky. Sometimes it will be an isolated note and sometimes it will be repeated. Sometimes a second bird voice answers it. Then all will lapse again into silence. In ten minutes, perhaps, the call is repeated. Quite a twittering ensues, but the majority apparently decide to stay early to leave their nests, and silence falls upon the street again. This is repeated again and again for more than an hour, and it is four o'clock and sunlight before the full chorus marks the setting-up hour of the birds. Even then they are seen about leaving the trees and descending to the asphalt.

Toward noon there is not a sign of a chirp in the streets, but either go back to their nests or fly over to the park, the man has not been able to find out which. "Even the birds," was the comment "sleep badly in the city. The rickshaws and the flashing electric lights disturb their rest, and like the rest of the city folk, they awake only half refreshed and want another dose to brace them up for a noisy New York day."

INDIAN WAS QUICK-WITTED.

Didn't Get Tired Like the Others Because He Took Frequent Rests.

The late Clement Scott, the English dramatic critic, took a profound interest in the American Indian. He had at his disposal tip a hundred incidents when with to illustrate odd phases of the Indian's character, either an exchange of views.

"As a rule," he once said, "we regard the Indian as a straightforward, frank, bold fellow. We don't associate with him any idea of wiles, or craft, or slyness. As a matter of fact, though, the American Indian is very much full of mean tricks and lies." "There was a farmer in the west one summer who was hard put to it for help upon his farm. Indians were plentiful in the neighborhood, but they were poor workmen. Always tired, they would put on the horse or the rail as soon as the master's back was turned, and before he could get away they would be down on the grass and eat the day away.

"One morning a white tall cuber Indian asked the farmer to give him work. "No," said the white man, "You will get tired. You Indians are always getting tired." "Oh, no," said the other. "This Indian never get tired. This Indian not like the rest?" "Well, I'll try you," said the farmer, and he engaged the man. He put him to work in a wheat field, then he went away for an hour or two. When he returned he found the Indian asleep under a tree. "Here, wake up, here," he cried. "You told me you never get tired." "No," said the other, yawning, "the Indian don't. But if he not be tired often he would get tired, just like the white man." "Oh, no," said the other. "This Indian never get tired. This Indian not like the rest?"

"Well, I'll try you," said the farmer, and he engaged the man. He put him to work in a wheat field, then he went away for an hour or two. When he returned he found the Indian asleep under a tree. "Here, wake up, here," he cried. "You told me you never get tired." "No," said the other, yawning, "the Indian don't. But if he not be tired often he would get tired, just like the white man." "Oh, no," said the other. "This Indian never get tired. This Indian not like the rest?"

DIAGNOSIS BY LIGHT

SURGERY OF THE NOSE REVOLUTIONIZED BY INVENTIONS.

Much Has Been Accomplished by Electricity—Before Its Introduction Doctors Had to Guess.

"The modern treatment of diseases of the nose and the parts of the head behind it is largely a development of the incandescent lamp," said the specialist, as he gave his victim five minutes' rest, states the New York Sun. "Two other things have helped enormously—cocaine and adrenaline, but the electric light is the thing."

"Cocaine is an old story now; but I don't think for a specialist has had an important effect on any other specialty, except, of course, the eye, as it has had on nose work. It makes easy not only examinations but operations, even which were impossible a few years ago. Adrenaline is an extract from the suprarenal capsule, an appearance of the kidney. It is a very modern discovery. I doubt if it has been in use more than three years. Its effect is to shrink up the tissues and a most close blood vessels."

"This light is brilliant, steady and only in the patient spared in that way, but the operator can see exactly what he is doing, a condition which naturally is impossible where there is profuse bleeding." "And the electric light?" suggested the victim. "The electric light," said the doctor, "has simply created modern practice in this specialty."

He had over his head and coming down over his nose a broad strap of spring steel covered with leather. It looked just like a football player's visor. Right over the top of his nose shone an incandescent light about the size of a dime. Wires connected it with the current lighting the room.

"Just think of the comfort of this," said the doctor, "compared with the old method. As soon as you are under the light you have a light behind your head and a reflector on your nose instead of this lamp."

"This light is brilliant, steady and penetrating, and perfectly unobtrusive. The reflector that was diffused, for example, is now a sharp beam of light that can be directed to any moment to reposition the light."

"But this only a trial, as you will now find out." The doctor selected from the case an object eight inches long, which must have been taken for a musical instrument. He screwed it for the want of a stage conjurer. He screwed it to the reduced current wire and as he pressed or released the tension of his fingers on a particular spot, the lamp glowed or disappeared in the end of the shaft, in which a thin pane of glass was set flush with the edge. Then the doctor bowed slightly and bowed and drew blinds, and the room was pitch dark.

"Open your mouth," said the doctor. "The victim did so, and at once the doctor put the glowing lamp within in between his teeth. "Close your lips tight," was the next order. "Now what do you notice?" "The victim opened his mouth," he said. "I seem to see the light."