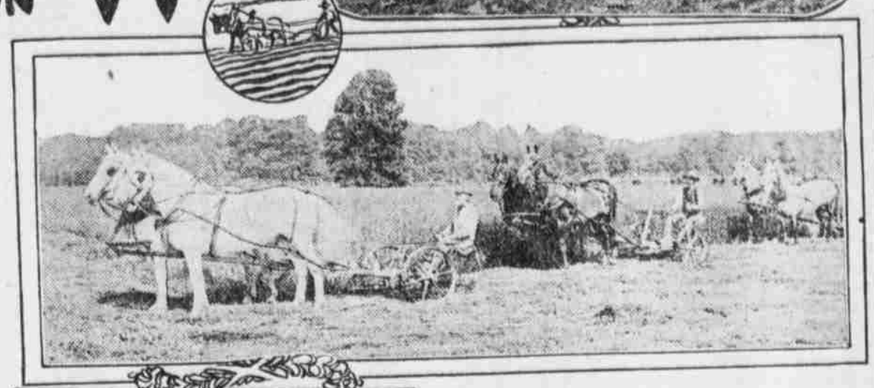
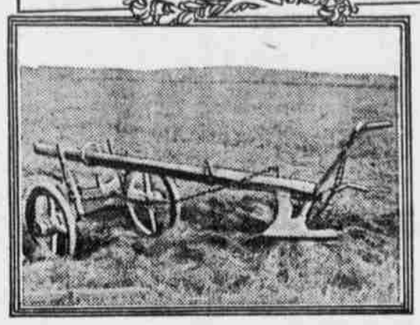
TOOLS, THE TEAM, AND THE MAN DETERMINE GOOD OR BAD PLOWING

By S. M. CLINTON





ALTHOUGH the plow is the first implement used by man in field farming, real progress in its development has come only within the last fifty years. First mention of the plow in the Old Testament is by Job where he says: "The oxen plowing and the asses feeding beside them." In Job's time the plow was probably a crooked stick drawn by oxen, with a straight stick bound to their horns to which a grass rope was attached.

This kind of implement was in use for thousands of years afterward, and even now in Old Mexico, within a hundred miles of the borderland of America, the crooked stick is still used.

About a hundred and fifty years ago a plow with a wooden mold board was devised, and this held sway for fifty years, when some genius of a blacksmith put an iron edge on it, and it was then thought that the perfection of plow making had been reached. Then came the plow with the iron mold board and wooden frame. This was followed by the all-steel plow, which now reigns supreme.

The aristocratic offspring of the all-steel plow is the disk, and this implement, in connection with the plow itself, is doing such good work that it does not seem possible that we shall see any decided improvement in this instrument for some time.

Good plowing depends as much upon the kind of plow used as upon the man who directs it. A great many farmers have yet to learn that one plow will not do satisfactory work in all kinds of soil and under all conditions.

Perhaps the best plow to use is the one with the chilled share and point. I think it is a mistake to use a plow point that has to be constantly renewed; for every time a blacksmith tinkers with it he turns out a different kind of plow, and this is one reason why there is so much poor plowing done in this country. When a man gets a plow which does the work to his entire satisfaction he should stick to it, and never permit its shape to be changed, if possible. With a soft point that has to be constantly renewed this is not possible, and that is why I prefer the chilled point.

Daniel Webster once essayed to be a plowmaker. After years of deep thinking and experimenting, he turned out a most wonderful implement. It was over twelve feet long, built of wood, with an iron point, and required four yokes of oxen to pull it. It turned a furrow eighteen inches wide, twelve inches deep, which resembled the irrigation ditches of today. This did not last long, however, and was never used outside of Massachusetts.

To do good work the plow must scour well; that is, the soil must slip from the mold board evenly, leaving the surface bright and clean. Poor scouring is due to many causes. The mold board may be too soft to take a good polish, or it may be imperfectly ground, or slight imperfections may have been left in the surface.

To test a good mold board is an easy matter. By running the fingers over the surface from the bottom to the top one can easily tell whether the plow has the right shape, and whether its surface is perfect. A plow should have a hardened edge and point—the harder the better—because upon the wearing qualities of the plow depend success or failure to a very large degree.

For breaking new sod, a plow with a long, sloping share and mold board should be used, but for stubble or well-tilled ground the plow with short, steep mold board is better. The breaking plow turns the sod over evenly, and covers all growth so that it rots and forms humus in the soil.

Upon the shape of the plow also depends the draft. A plow unsuited to the soil on which it is used will cause a much greater draft than is necessary, wearing out the strength of the team and the patience of the plowman. The more abrupt the curvature of the mold board the more pulverizing the action upon the furrow slice. The use of a colter reduces the draft materially, particularly on tough soils, clover sod and the like.

Some farmers claim that the only first-class plowing that can be done is with the walking plow, but I have seen some of the best plowing done with a sulky plow. There is not much difference in the draft. A sulky plow carrying a man will be about as easy on a team as walking, because the friction of the mold board of the walking plow is eliminated to some extent.

The draft of the walking plow depends largely upon the way in which it is set. If properly adjusted with a steady pull so that the heel or wing does not press too heavily against the soil, the plow will run easily, smoothly, and with very little attention from the plowman. I have seen the men follow the plow round after round without even touching the handle, except at the turning point.

Another important thing in plowing is to have the width of the furrow just right. If the plow is set to take a larger land than it can turn over properly, it will leave much vegetation uncovered, and the field will be ridgy. The plow should be set to exactly cut and cover all that it enters, and no more. When a plow runs properly it should set exactly level.

No man is a good farmer unless he is first of all a good plowman. Upon the skill with which he plows his fields depends to a considerable extent the facility with which he can cultivate his crop, and, in fact, its yield.

The question of deep or shallow plowing is one which must be studied by every man, and adapted to the needs of his soil and his crop.

Deeply plowed soil contains moisture longer, affords better home for fertilizer and all kinds of plant food, is more easily cultivated, and is always to be desired.

Backache is Discouraging

Nothing is more discouraging than a constant backache. Lame when you awaken, pains pierce you when you bend or lift. It's hard to work or to rest. Backache often indicates bad kidneys. If the urine is disordered, passages too frequent or scanty, there is further proof. Delay is dangerous. Prompt use of Doan's Kidney Pills now may spare you serious trouble later. Doan's is the world's best-recommended kidney remedy.

A Nebraska Case

"Every Picture Tells a Story"

John U. Metcalf, 815 Pacific St., Omaha, Neb., says: "The secretions from my kidneys were retarded and painful in passage. I also had gravel and was laid up in bed for six months under the doctor's care. Rheumatic pains developed and one of my limbs became useless. Doan's Kidney Pills drove the rheumatic pains away, cleared up the kidney secretions and restored me to good health."

Get Doan's at Any Store, 50c a Box

DOAN'S KIDNEY PILLS

FOSTER-MILBURN CO., BUFFALO, N. Y.

Constipation Vanishes Forever

Prompt Relief—Permanent Cure

CARTER'S LITTLE LIVER PILLS never fail. Purely vegetable — act surely but gently on the liver. Stop after dinner distress—cure indigestion, improve the complexion, brighten the eyes.

SMALL PILL, SMALL DOSE, SMALL PRICE.

Genuine must bear Signature

Brent Good

BLACK LEG

LOSSES SURELY PREVENTED by Cutter's Blackleg Pills. Low-priced, fresh, reliable; preferred by Western stockmen, because they protect where other vaccines fail. Write for booklet and testimonials. 10-dose pkge. Blackleg Pills $1.00 50-dose pkge. Blackleg Pills 4.00 Use any injector, but Cutter's best.

The superiority of Cutter products is due to over 15 years of specializing in vaccines and serums only. Insist on Cutter's. If unobtainable, order direct. The Cutter Laboratory, Berkeley, Cal., or Chicago, Ill.

Why the Applause.

The amateur theatrical performance was being discussed.

"You know that part of the new play where the man seizes the woman, forces her into the cupboard, and turns the key on her?"

"Yes."

"Well, last night a fellow in the audience applauded it so much that they had to put him out."

"I don't think there is anything to applaud about it."

"Yes, there was. It turned out that the fellow was the husband of the actress, and it was the first time he had ever seen anybody shut her up," was the cool reply.

He Still Had Hope.

After a hurried rush through the night the doctor found his patient in a very bad way.

"My dear sir," he said slowly, "I have been attending you for nine weeks and have done my best, but I'm afraid that your end is near. Have you any last wish to express?"

The patient drew a long breath.

"Yes," he replied, in a faint voice, "I wish I had had another doctor."

Help Wanted.

"Why didn't you hire that office boy? He looked like a hustler."

"He told me he didn't know the batting averages of all the major league players."

"Pshaw! Neither do you."

"That's just my point. I've got to have an authority in the office I can refer to occasionally."

Firm Basis.

"Let us cement our friendship."

"Then we had better do it by taking some concrete action."

Something on the Rest of 'Em.

"Why her superior airs?"

"She was a passenger on a ship that was chased by a submarine."

GOT A LITTLE SATISFACTION

Motorist Employed Rather Neat Way of "Getting Even" After His Arrest for Speeding.

A motorist was stopped by a policeman for speeding, whereupon he became angry and called the policeman an ass. After he had paid his fine, the judge reproved him for what he had said to the officer.

"Then I mustn't call a policeman an ass?" he said.

"Certainly not," said the judge. "You must not insult the police."

"But you wouldn't mind if I called an ass a policeman, would you?"

"Why, no, if it gives you any satisfaction," answered his honor with a smile.

The motorist turned to the man who had arrested him. "Good day, policeman," he said, and immediately left the courtroom.—Boston Transcript.

Sometimes the wages of sin is paid in the coin of the realm.

Drink Denison's Coffee, For your health's sake.

A coat of paint will make some things look as good as new, but a woman isn't one of them.

Tit for Sack.

"So Bob didn't bag the heiress?"

"No; she gave him the sack."

All the Same.

"Going to send your son back to college this fall?"

"Might as well. It doesn't cost much more to let him loaf there than it does at home."

HOW TO HEAL STUBBORN TORMENTING SKIN DISEASES

A Baltimore doctor suggests this simple, but reliable and inexpensive, home treatment for people suffering with eczema, ringworm, rashes and similar itching, burning skin troubles.

At any reliable druggist's get a jar of resinol ointment and a cake of resinol soap. These will not cost a bit more than seventy-five cents. With the resinol soap and warm water bathe the affected parts thoroughly, until they are free from crusts and the skin is softened. Dry very gently, spread on a thin layer of the resinol ointment, and cover with a light bandage—if necessary to protect the clothing. This should be done twice a day. Usually the distressing itching and burning stop with the first treatment, and the skin soon becomes clear and healthy again.—Adv.

Electricity on Farms.

Rural distribution of electric current has made great advances in the last two years. In some communities the farmers have financed local distribution systems, taking current from the nearest cross-country transmission line at one point and retailing it among themselves. In other communities individual farmers find it desirable to pay for lines directly from the power plant to the farm. Other electric companies install the connection and require a yearly minimum use proportionate to the investment in the line extension.

Dangerous Game.

"Why did the police break up the children's game over there?"

"Please, your wushup, they's was playin' 'I spy.'"

She Heard Anyway.

"Do you tell your wife everything you do while she is away?"

"No; the neighbors attend to that."

Women With Tact.

Some women have a sense of humor, while others have tact and laugh at their husband's jokes.

Anyway, the man who looks into the barrel of a gun to see whether it is loaded hasn't enough sense to keep him from committing bigamy.

The population of the regency of Tunis is now about 2,000,000, of whom 200,000 are foreigners, chiefly Italians, French and Maltese.

IN ALL OUR NEIGHBORHOOD

There Is Hardly A Woman Who Does Not Rely Upon Lydia E. Pinkham's Vegetable Compound.

Princeton, Ill.—"I had inflammation, hard headaches in the back of my neck and a weakness all caused by female trouble, and I took Lydia E. Pinkham's Vegetable Compound with such excellent results that I am now feeling fine. I recommend the Compound and praise it to all. I shall be glad to have you publish my letter. There is scarcely a neighbor around me who does not use your medicine."—Mrs. J. F. JOHNSON, R. No. 4, Box 30, Princeton, Illinois.

Experience of a Nurse.

Poland, N. Y.—"In my experience as a nurse I certainly think Lydia E. Pinkham's Vegetable Compound is a great medicine. I wish all women with female troubles would take it. I took it when passing through the Change of Life with great results and I always recommend the Compound to all my patients if I know of their condition in time. I will gladly do all I can to help others to know of this great medicine."—Mrs. HORACE NEWMAN, Poland, Herkimer Co., N. Y.

If you are ill do not drag along until an operation is necessary, but at once take Lydia E. Pinkham's Vegetable Compound.

If you want special advice write Lydia E. Pinkham Medicine Co., (confidential) Lynn, Mass.

W. N. U., SIOUX CITY, NO. 37-1915.

Some Refreshment.

Rear Admiral Fletcher during the maneuvers off Newport told a story at a garden party.

"The navy is as abstemious from ethical reasons," he began, "as old Stingee was from miserliness."

"Old Stingee was entertaining a boyhood friend one evening at his shore cottage. After a couple of hours of dry talk, the old fellow said genially:

"'Would you like some refreshment—a cooling draft, say—George?'

"'Why, yes; I don't care if I do,' said George, and he passed his hand across his mouth and brightened up wonderfully.

"'Good!' said old Stingee. 'I'll just open up this window. There's a fine sea breeze blowing.'"—Detroit Free Press.

Painful Truth.

Miss Singwell had been a member of the choral society ever since it had been in existence, and it was undoubtedly true that her first youth had waned, but the choirmaster was astounded recently by the news that she had resigned her membership.

"Resigned!" he gasped. "But whatever for?"

"Well, I don't know exactly," said the secretary, "but it strikes me that it may have something to do with the solo we picked for her at the next performance."

"Why? What is it?"

"Don't you remember? It begins, 'I once was young, but now am old.'"

Just What She Wants.

Church—How is the table up where your wife is boarding in the country?

Gotham—Very, very poor.

"And she remains there?"

"Oh, yes; she's trying to reduce her weight."

When He Asked Father.

The Dear Girl—Well, did you succeed in making papa toe the mark?

The Young Man (sadly)—Yes, but I was the mark.

Even in being wedded to his art, many a man marries in haste and repents at leisure.

CHATS WITH THE AMBITIOUS FOLK

By ORISON SWETT MARDEN.

NEVER TOO LATE FOR SELF-IMPROVEMENT.

A New York millionaire—a prince among merchants—took me over his palatial residence on Fifth avenue, every room of which was a triumph of the architect's, of the decorator's, and of the upholsterer's art. I was told that the decorations of a single sleeping room had cost $10,000. On the walls were paintings which cost fabulous prices, and about the rooms were pieces of massive and costly furniture and draperies representing a small fortune, and covering the floors were carpets on which it seemed almost sacrilege to tread. He had expended a fortune for physical pleasure, comfort, luxury and display, but there was scarcely a book in the house.

It was pitiful to think of the physical surfeit and mental starvation of the children of such a home as that. He told me that he came to the city a poor boy, with all his worldly possessions done up in a little red bandana. "I am a millionaire," he said, "but I want to tell you that I would give half I have today for a decent education."

One of the sad things about the neglected opportunities for self-improvement is that they put people of great natural ability at a disadvantage among those who are their mental inferiors.

I know a pitiable case of a born naturalist whose education was so neglected in youth that later, when he came to know more about natural history than almost any man of his day, he could not write a grammatical sentence, and could never make his ideas live in words, perpetuate them in books, because of his ignorance of even the rudiments of an education.

Think of the suffering of this splendid man, who was conscious of possessing colossal scientific knowledge, and yet was absolutely unable to express himself grammatically! It is difficult to conceive of a greater misfortune than always to be embarrassed and handicapped just because of the neglect of early years.

Many a girl of good natural ability spends her most productive years as a cheap clerk or in a mediocre position because she never thought it worth while to develop her mental faculties or to take advantage of opportunities within reach to fit herself for a superior position. Thousands of girls unexpectedly thrown on their own resources have been held down all their lives because of neglected tasks in youth, which at the time were dismissed with a careless "I don't think it worth while." They did not think it would pay to go to the bottom of any study at school, to learn to keep accounts accurately, or fit themselves to do anything in such a way as to be able to make a living by it. They expected to marry, and never prepared for being dependentent on themselves—a contingency against which marriage, in many instances, is no safeguard.

The number of perpetual clerks is constantly being recruited by those who did not think it worth while as boys to learn to write a good hand or to master the fundamental branches of knowledge requisite in a business career. The ignorance common among young men and young women in factories, stores and offices, everywhere, in fact, in this land of opportunity where youth should be well educated, is a pitiable thing.

How often stenographers are mortified by the use of some unfamiliar word or term, or quotation, because of the shallowness of their preparation! It is not enough to be able to take dictation when ordinary letters are given, not enough to do the ordinary routine of office work. The ambitious stenographer must be prepared for the unusual word or expression, must have good reserves of knowledge to draw from in case of emergency. If she is constantly slipping up on her grammar, or is all at sea the moment she steps out of her ordinary routine, her employer knows that her preparation is shallow, that her education is limited, and her prospects will be limited, also.

Everywhere we go we see men and women, especially from twenty-five to forty years of age, who are cramped and seriously handicapped by the lack of early training. I often receive letters from such people, asking if it is possible for them to educate themselves so late in life. Of course it is. There are so many good correspondence schools today, and institutions like Chautauqua, so many evening schools, lectures, books, libraries and periodicals, that men and women who are determined to improve themselves have abundant opportunities to do so.

One trouble with people who are smarting under the consciousness of deficient education is that they do not realize the immense value of utilizing spare minutes. Like many boys who will not save their pennies and small change because they cannot see how a fortune could ever grow by the saving, they cannot see how a little studying here and there each day will ever amount to a good substitute for a college education.

People who feel their lack of education, and who can afford the outlay, can make wonderful strides in a year by putting themselves under good tutors, who will direct their reading and study along different lines.

There is one special advantage in self-education—you can adapt the studies to your own particular needs better than you could in school or college. Everyone who reaches middle life without an education should first read and study along the line of his own vocation, and then broaden himself as much as possible by reading on other lines.

Every well-ordered household ought to protect the time of those who desire to study at home. At a fixed hour every evening during the long winter there should be by common consent a quiet period for mental concentration, for what is worth while in mental discipline, a quiet hour uninterrupted by the thief callers. There is a divine hunger in every normal being for self-expansion, a yearning for growth or enlargement. Beware of selling this craving of nature for self-unfoldment. There is untold wealth locked up in the long winter evenings and odd moments ahead of you. A great opportunity confronts you. What will you do with it?

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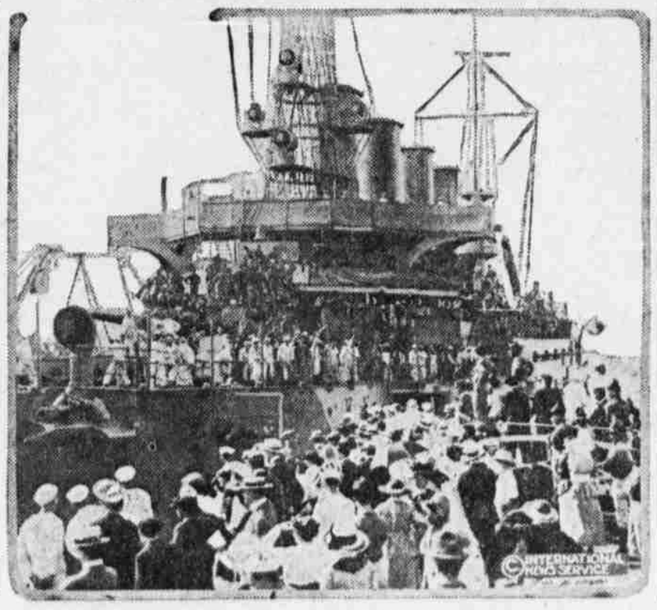
No Longer Room at the Top.

Prof. Scott Nearing says the motto, "there is plenty of room at the top" is no longer true in this country on account of the fact that in every great industry only three of every one thousand employees have a chance to rise to the top. The professor's statement is no doubt literally correct, but he will probably not deny that the motto still applies to those spheres of activity which cannot be considered under the head of industry.—Washington Herald.

U. S. BATTLESHIP READY FOR SEA



EXPLANATION OF THE CROWD

Few Members of Big Gatherings Act and Think as They Would Do as Individuals.

The most striking peculiarity presented by a phychological crowd, according to Gustav Le Bou, is the following: Whoever be the individuals that compose it, however like or unlike be their mode of life, their occupations, their character or their intelligence, the fact that they have been transformed into a crowd puts them in possession of a sort of collective mind which makes them feel, think and act in a manner quite different from that in which each individual of them would feel, think and act were he in a state of isolation.

There are certain ideas and feelings which do not come into being or do not transform themselves into acts except in the case of individuals forming a crowd.

The psychological crowd is a provisional being formed of heterogeneous elements which for a moment are combined exactly as the cells which constitute a living body form by their reunion a new being which displays characteristics very different from those possessed by each of the cells singly.

What really takes place is a combination followed by the creation of new characteristics, just as in chemistry certain elements, when brought into contact—bases and acids, for example—combine to form a new body possessing properties quite different from those of the bodies that have served to form it.

Needed It.

Theatrical Manager—Hi, there! What are you doing with that pistol?

Discouraged Lover—Going to kill myself.

Theatrical Manager—Hold on a minute. If you're bound to do it, won't you be good enough to leave a note saying you did it for love of Miss Star, our leading lady? It's a dull season, and every little helps.

Start Children to School Right

After the vacation rest, school children should quickly settle down to the task of learning. Do your part!

Parental responsibility does not end by sending them to school. The child must be equipped with mind and body at their best.

And here the right food plays a most important part.

Growing children need energy; the right kind and lots of it. And energy comes from well-nourished nerves and brain.

Grape-Nuts

—a food made from wheat and barley, contains the vital mineral salts—Phosphate of Potash, etc. (grown in the grains) which directly act with other food values to build up body, brain and nerves.

Statistics prove that much of the "backwardness" of some children is due to faulty nourishment.

A morning dish of Grape-Nuts and cream is good alike for the bright scholar and the backward pupil. The latter needs the nutrition; the former will progress in sounder physical and mental health because of it.

"There's a Reason" for Grape-Nuts

—sold by Grocers everywhere.