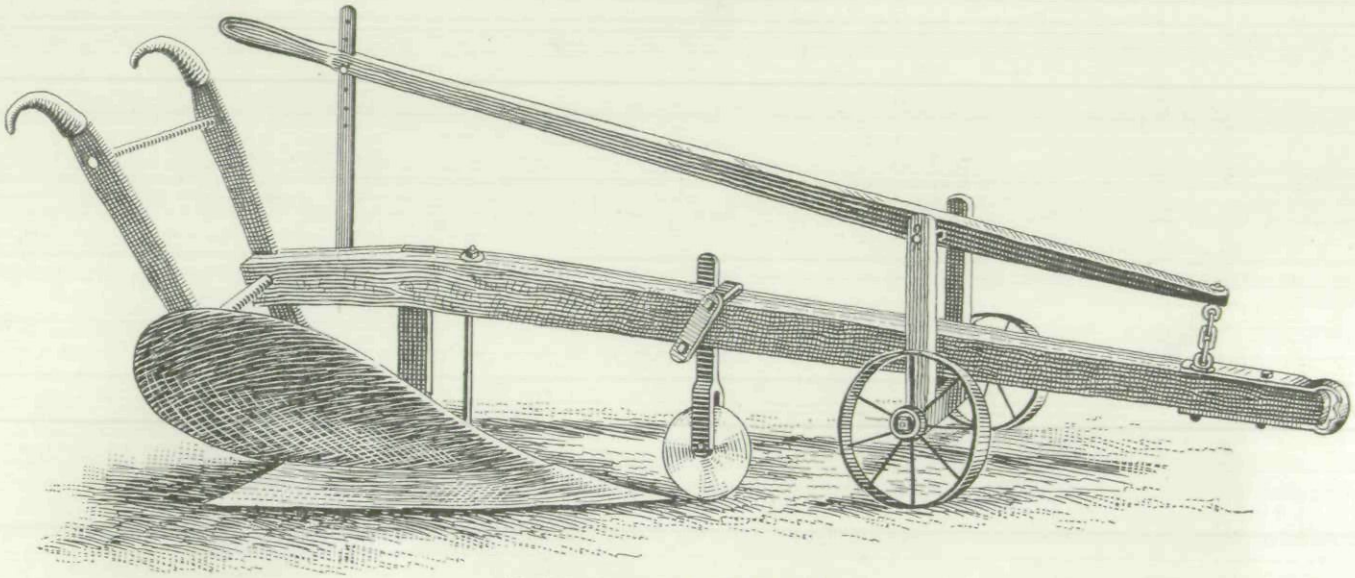

AN OLD IOWA BREAKING PLOW

A plow similar to the one above has recently been received by the Museum of the Historical, Memorial and Art Department from the estate of Lanson Howell. The plow was used by Mr. Howell in breaking Iowa prairie near Patterson, Iowa, as early as 1855.

THE HEAVY BREAKING PLOW

The Historical Department has been fortunate in recently receiving from the estate of Lanson Howell the gift of an old "breaking plow," used by Mr. Howell in Madison and adjoining counties as early as 1855 in plowing prairie covered with scrub oak and other small trees, as well as with heavy growths of hazel brush. This type of plowing was then known as "heavy grub plowing."

In its normal work of heavy grub plowing, the twenty-two inch bottom Howell plow was pulled by nine yoke of oxen, although in lighter breaking less oxen were used. The mold-board, plow-share, frog, land-side, and standing cutter are of steel, while the handles are of wood. Originally at the far end of the beam were a pair of trucks, or wheels, also part of the original plow was a long lever which, fastened at one end to the trucks, extended to the handles of the plow at the other. In general the Howell plow is in excellent condition, and makes an interesting addition to the collection of the department.

Although the fires that periodically swept the prairies in the early years tended to dwarf the growth of the grubs, or to destroy their shoots altogether, the roots underground remained, and often grew to considerable size. The major task of the breaking plow, of course, was to cut these roots. By manipulating the lever just before the root was struck, the man behind the plow was able to gauge the depth at which the root should be cut. One can well realize the sweating toil required of every breaking outfit having a plow of the type used by Mr. Howell if they were to make good the boast that they could "cut any grub the oxen could straddle."

Because it contains a vivid description of the breaking plow used in Iowa in the "middle years" of the last century, the author quotes below from an article entitled "Breaking Prairie" by Hon. L. S. Coffin of Fort Dodge, which appeared in Vol. V of THE ANNALS, pp. 448 et seq:

> All attempts to present a word picture of it must fail to give any person who has never seen one a true idea of the real thing. These plows, as a rule, were very large. They were made to cut and turn a furrow from twenty to thirty inches wide and sometimes even wider. The beam was a straight stick of strong timber seven to twelve feet

long. The forward end of this beam was carried by a pair of trucks or wheels, and into the top of the axle of these wheels were framed two stout, upright pieces just far enough apart to allow the forward end of the plow-beam to nicely fit in between them. To the forward end of the beam and on top of it, there was fastened by a link or clevis, a long lever, running between these stout standards in the axle of the trucks, and fastened to them by a strong bolt running through both standards and lever; this bolt, acting as a fulcrum for the lever, was in easy reach of the man having charge of the plow. By raising or depressing the rear end of this lever the depth of the furrow was gauged, and by depressing the lever low enough, the plow could be thrown entirely out of the ground. One of the wheels of the truck ran in the furrow and was from two to four inches larger than the one that ran on the sod. This, of course, was necessary so as to have an even level rest for the forward end of the plow-beam. The mould-boards of these plows were sometimes made of wood protected by narrow strips of steel or band-iron, and fastened to the mould-board. In some cases these mould-boards were made entirely of iron rods, which generally gave the best satisfaction. The share of these plows—"shear," as we western folks called it—had to be made of the very best steel so as to carry a keen edge. The original prairie sod was one web of small tough roots, and hence the necessity of a razorlike edge on the "shear" to secure good work and ease to the team.

And next, the "prairie-breaking" plow team? Who sees the like of it today? A string of from three to six yokes of oxen hitched to this long plow-beam, the driver clad in somewhat of a cowboy style, and armed with a whip, the handle of which resembled a long, slender fishing-rod, with a lash that when wielded by an expert was so severe that the oxen had learned to fear it as much as the New England oxen did the Yankee ox-goad with its brad.

The season for "breaking prairie" varied as the spring and summer were early or late, wet or dry. The best results were had by beginning to plow after the grass had a pretty good start, and quitting the work some time before it was ready for the scythe. The main object aimed at was to secure as complete a rotting of the sod as possible. To this end the plow was gauged to cut only one and one-half to two inches deep. Then, if the mould-board was so shaped as to "kink" the sod as it was turned over, all the better, as in the early days of "prairie-breaking" very little use was made of the ground the first year. The object was to have the land in as good a shape as possible for sowing wheat the following spring. A dry season, thin breaking, "kinky" furrows, and not too long breaking accomplished this, and made the putting in of wheat the following spring an easy task. But on the contrary, if broken too deeply, and the furrows laid flat and smooth, or in a wet season, or if broken too late, the job of seeding the wheat on tough sod was a hard and slow one.

The outfit for "prairie-breaking" was usually about as follows: Three

to six yokes of oxen, a covered wagon, a small kit of tools, and among these always a good assortment of files for sharpening the plow-share, a few cooking utensils, and sometimes a dog and pony. The oxen, when the day's work was done, were turned loose to feed on the grass. To one or more was attached a far-sounding bell, so as to betray their whereaobuts at all times. The pony and dog came in good play for company, and in gathering up the oxen when wanted. The season for breaking would average about two months. The price per acre for breaking varied from $2.50 to $4.50, as the man was boarded or as he "found himself." In latter years when it was learned that flax could be raised to good advantage on new breaking, and that it helped to rot the sod, the breaking season commenced much earlier.

Three yokes of good-sized oxen drawing a twenty-four-inch plow, with two men to manage the work, would ordinarily break about two acres a day; five yokes with a thirty-six-inch plow, requiring no more men to "run the machine," would break three acres a day. When the plow was kept running continuously, the "shear" had to be taken to the blacksmith as often as once a week to be drawn out thin, so that a keen knife-edge could be easily put on it with a file, by the men who managed the plow. If the team was going around an eighty-acre tract of prairie, the "lay" or "shear" had to be filed after each round to do the best work. The skillful "breaker" tried to run his plow one and one-half inches deep and no deeper. This was for the purpose of splitting the sod across the mass of tough fibrous roots, which had lain undisturbed for uncounted years and had formed a network of interlaced sinews as difficult to cut as India rubber, where the prairie was inclined to be wet; and it was not easy to find an entire eighty-acre tract that was not intersected with numerous "sloughs," across which the breaking-plow had to run. In many places the sod in these "sloughs" was so tough that it was with the greatest difficulty that the plow could be kept in the ground. If it ran out of the ground, this tough, leathery sod would flop back into the furrow as swiftly as the falling of a row of bricks set up on end, and the man and driver had to turn the long ribbon of tough sod over by hand—if they could not make a "balk." In the flat, wet prairie, it sometimes took from two to three years for the tough sod to decompose sufficiently to produce a full crop. The plow had to be kept in perfect order to turn this kind of prairie sod over, and the "lay" had to have an edge as keen as a scythe to do good work. There were usually two "lays" or "shears" fitted to each plow, so that the team need not be idle while the boy with the mustang went often from five to eight miles to the nearest blacksmith to get a "lay" sharpened. Sometimes the oxen would stray off among the "barrens," or follow the course of some stream for miles and hide among the willows to take a vacation, and frequently they were not found until after two or three days of weary search by the men and boy, while the plow which ought to be earning six or nine dollars a day was lying idle on the great prairie.

There were men who equipped "a brigade" for breaking and carried on a thriving business from about the first day of May to the end of July.

When the rush of immigration began in the spring of 1854, there were not nearly enough breaking-teams in the country to supply the demand. In some cases the "newcomers" would consent to have a portion of their prairie farms broken up in April, and on this early breaking they would plant "sod corn." The process was simple; a man with an axe would follow the line of every second or third furrow, strike the blade deep in the ground, a boy or girl would follow and drop three or four kernels of corn into the hole and bring one foot down "right smart" on the hole in the sod, and the deed was done. No cultivation was required after planting, and in the fall a half crop of corn was frequently gathered without expense. Those who were not able to get breaking done at the best time for subduing the sod, were often glad to have some done in the latter part of July or the first half of August. So for several years the "breaking brigades" were able to run their teams for four months each year, and it was profitable business.

With all the crudeness, with all the exposure, with all the privations and hard times—for there were hard times in those days—yet, the passing of those pioneer days with the quaint old "prairie breaking-plow," the string of oxen, the old prairie-schooner wagon, the elk and deer, with now and then a buffalo, the prairie chickens, the "dug-outs," sod houses and log cabins, give to us old pioneer settlers a tinge of sadness difficult to express in words; for with all these have gone a great deal of that community and fellowship of neighborhood feeling, so common and so heartily expressed from one to another in the abounding hospitality and in the kindly exchange of help in those days. Then those living miles apart were friends and neighbors. Now the families living on adjoining quarter sections are strangers. Today it seems that each one thinks he must "go it alone," as did the old "prairie breaking-plow," which usually did go it alone, for it was so constructed as to hold itself; except at the beginning and at the end of the furrows there was little handling of the rear end of the long lever. It was easily made to take the sod and to leave it at the farther end.

While we say good-bye to this bygone "breaking-plow," let us not forget that it—like those early and hardy pioneers, rude though they were in some respects, like the old plow and other tools in that day—has bequeathed to us, who are reaping the rich harvest of their sowing, an inheritance of which we can be proud, and for which I most truly hope we are grateful.

Willowedge Farm, near Ft. Dodge, May, 1902.

One of the hardships in the later days of "prairie-breaking" in the '80's, not mentioned by Mr. Coffin, was the frequent necessity for the two men running a breaking outfit to "cold-hammer" the plow-lay, as we called the plow share in those days,

whenever it got dull. In grub breaking this might mean that the lay had to be hammered once every half day, sometimes oftener.

Cold-hammering required that the lay be removed from the plow and held on a strip of "railroad iron" (steel rail), five or six feet long, by one of the men, while the other hammered quite skillfully on the lay itself, to draw it out thin. The railroad iron had a two-fold value, first it took the place of the anvil, and second, because of its length, it was possible to keep the bottom of the plow-lay level. After hammering, the lay was filed to a sharp edge. However, too many "cold hammerings" thickened the cutting edge. Therefore from time to time the lay had to be removed and placed in the portable forge—every breaking outfit had one—and "upset," that is, heated to a white heat and then hammered along the cutting edge.

Yet all the hard work was not confined to running the plow. The business of getting several yoke of oxen into their yokes in the morning was no easy task of itself.

It may be, as the poet wrote, that there is joy in getting up early in the morning before the sun is up, but the author of this article never thought it a particular pleasure to get up at five o'clock in the summer time to go out on the prairie and hunt eighteen or twenty oxen, and to bring them into the corral where we could feed them grain while the workmen had their own breakfasts. But this was easy compared with the process of getting the yokes on eight or nine pair of oxen.

The yoke itself is heavy. Made of a heavy piece of wood called the beam, the yoke is carved at either end so as to rest on the neck of the ox without too much chafing. At each end of the yoke is a bow, a curved piece of wood which passes under the neck of the oxen and is fastened to the beam by pins called keys. Thus, it can be seen that together with a heavy iron ring fastened in the center of the beam, the yoke when completed was indeed heavy and difficult to handle.

To get the ox yoke on the oxen, it was necessary first to lift one end of this heavy beam up off the ground and raise it as high as the neck of the ox. The outside key then had to be removed and the bow swung outward for the off ox. The ox was then called to "come under." The man holding up the yoke, of course, could not chase the ox; a second man or a good dog

came into play here, the idea being to drive the ox up to the yoke and have him stand still long enough so that the beam could be laid across his neck, the bow placed around the under part of the neck, and the end inserted through the beam and fastened with the key. When this was done, the man held up the other end of the yoke, released the bow on the outward side, swung it inward, and called to the second ox to "come under." When the ox finally obliged, after much persuasion, the bow was closed around his neck, the key put into position, and one yoke was ready for work. By the time this was repeated seven or eight times, the man felt as though he had already done half a day's work.

The driver of the oxen then had the job of driving them out to the breaking plow and getting them lined up with the beam of the plow so that the chains could be properly fastened and the actual work of the day begun.

An important help to the driver in his work was the ox whip, the handle of which consisted of a long slender piece of wood, eight to ten feet long, stiff enough to stand a good deal of strain, yet with sufficient "spring" in it to enable the driver to use the long lash attached to its upper end. The lash, also about eight to ten feet in length, was usually made of several strands of plaited leather. At the free end of the lash was a piece of leather called the "cracker," and at the end of this cracker was a knot. It was the boast of a good ox driver that by a smart blow with the end of this cracker he could cut a buttonhole in the hide of any ox that refused to do his bit.

It was slow, tedious, and hard work, this job of breaking a prairie. When the prairie sod had been turned, the job of breaking was not complete, although it was finished for the farmer as far as the breaking outfit was concerned. The farmer then had to take a pick and dig out the grubs from the sod, place them in piles and burn them, although in the early days the roots were often saved, as they furnished the only fires the family would have for the winter.

Late in the fall, when the early spring breaking had rotted, the task of back setting the breaking was begun. This too was a hard job because it was done with an ordinary steel plow which, of course, was not as wide as the breaking plow. Consequently, if the plow struck a piece of sod that had not rotted

sufficiently well to allow the colter to cut it clean, the man behind the plow was very likely to turn a somersault.

The work performed by the Howell plow, and many others like it, was hard on both the man and the team, but it had to be done in order that the ground might be suitably prepared for the crop the next spring. Yet, though the process of carving a farm out of the prairie was a hard and trying matter, Iowa as an agricultural state is indebted to the labors of these men who in years gone by "broke" her prairie.

OLD LAW REPORTS

One of the finest gifts that this department has received in many years is a gift of eighteen volumes in the field of law, given to this department by the Grant Law Library, Incorporated, at Davenport.

Sixteen of these volumes are reports of the English courts, two of which were published in 1656, one in 1657, two in 1658, two in 1659, one in 1661, one in 1675, one in 1677, one in 1681, one in 1682, two in 1688, one in 1689, and one in 1741, although the cases that were published in some of these are much older than the years of publication.

Some of these were originally written in Latin, as for example, one that was published in 1656; namely, REPORTS and CASES taken in QUEEN ELIZABETH'S, KING JAMES' and KING CHARLES' COURTS. An eminent English lawyer, William Noy, made these reports from the written arguments that were filed by the lawyers and the judges.

In their foreword, the translators make the following statement about William Noy: "That he was a person that hated anything of prolixness; he was a man that writ *multumparvo*, or if you'll have that near home, all languages in 24 letters." And further, "That in the translation of apt and significant words, you'll have them as he writ 'em."

There are annotations and handwriting of years long ago on the margins. A study of the cases shows that the decisions, though using legal terms strange to us now, are based on the same lines of reasoning now followed by our courts; for ex-