

Tractor Graders

Over the years I have had several requests to try and research tractor graders that were made from McCormick-Deering or IH tractors. Thanks to the Wisconsin McCormick Archives for the Austin literature that is on the cover. I did find information on the internet and most of my information come from our members. Information on H's and M's was harder to research than the older ones for some unknown reason. No literature on H's and M's was found but I am sure there is some out there. The most information about M's was found after contacting Jim Brewers in Minnesota. No information on the Trojan and American companies but I did find some pictures. I know I won't cover all the different brands but hope that you readers will follow up with any information you know about the subject.

The **Galion Iron Works Company** of Galion, Ohio was founded by David Charles Boyd in 1907. In its early years, the Galion name appeared on a wide range of road-building and other construction equipment, such as drag scrapers, plows, wagons, stone unloaders, rock crushers, and a variety of other "experimental machines". By 1911, Galion had begun production of a light-duty, horse-drawn road grader. Galion was famous for its huge pull-type graders, some of the largest ever built, designed to be pulled behind the largest tractors available. The No 14 shown here is equipped with scarifier, steerable tongue, 14-foot blade and hand-operated controls. This heavy-duty piece of iron tipped the scales at 15,000 pounds. Popular throughout the 1920s and 1930s, these huge machines were pulled by the largest traction engines and crawler tractors available. These graders outperformed other motor graders of the day. Galion continued selling its pull-type graders until 1945, long after other manufacturers discontinued pull-type graders. An example of a 1927 "Galion Patrol" is shown here on a 10-20. In 1926, Galion was one of the first companies to develop a self-propelled motor grader. The tractor engine and transmission were located in the rear of the frame, and the operator cockpit was located near the center of the machine. Also in the 1920s, development work began on one of Galion's greatest achievements, the Galion hydraulic control. Used on both pull-type and self propelled graders, this hydraulic system was one of the first to be applied to grader controls. In 1929, Jeffery Manufacturing Company of Columbus, Ohio, purchased the Galion Organization, but the name of the company remained unchanged. In 1986, the grader products took on the name of the parent company, Dresser, and the Galion name was temporarily dropped. In 1988 Galion became part of the Komatsu Dresser Company joint venture. The Galion name reemerged in 1992, when the Galion division of KDC was established.

Russell Grader Manufacturing Company was founded in 1903 by Richard Russell and C. K. Stockland in Stephen, Minnesota. Elevating graders and an unsuccessful gas engine were the first products. The company relocated to Hamline, Minnesota in 1906 and began manufacturing pull graders in 1908 with the introduction of a two-horse patrol machine. Russell sales literature claims that they produced the "first patrol grader on the market". The #3 motor patrol with the 10-20 was produced from late 1925 until 1929. Grader Manufacturing Company was acquired by Caterpillar Tractor Company in 1928, and graders were Cat's first product

Galion

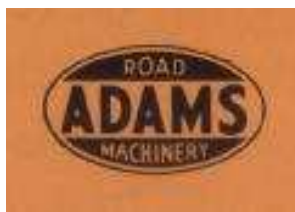


1939 I-14 Galion Jr.



Russell 10-20



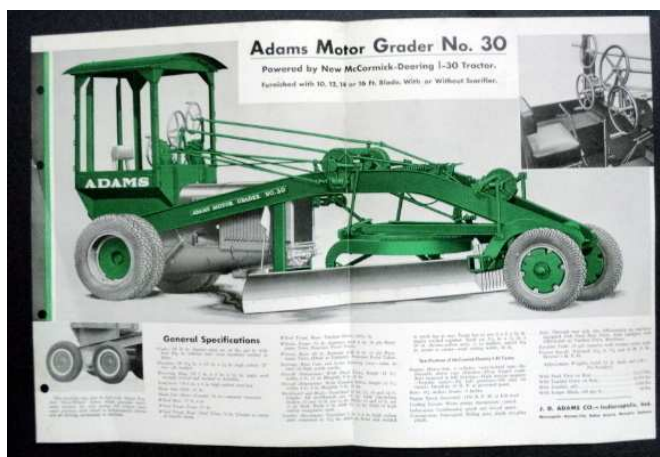


outside of crawler tractors. Thanks to Andrew Dawson, Macon, MO for a booklet on Russell and Galion.

J. D. Adams

invented the first successful leaning-wheel pull grader in 1885, and founded J. D. Adams & Company. The Company, which was reorganized as J. D. Adams Company circa 1929, also produced elevating graders, sheepsfoot rollers, dozers, grader attachments, pull and rotary scrapers, force-feed loaders, and related equipment. Its Welding Division marketed an arc welder in 1936. Headquartered in Indianapolis, Indiana, Adams had a Canadian affiliate, J. D. Adams (Canada) Ltd., with offices in Toronto, Ontario, and Winnipeg, Manitoba. Adams was purchased by LeTourneau-Westinghouse in 1953; L-W retained the Adams brand name for its recognition value until 1960. In July 1929 a No. 12 motor grader conversion on a McCormick-Deering Model 20 wheel tractor was produced. This is the same as No. 10, except that No. 12 uses Trackson crawler conversion. From 1927 to 1930 J. D. Adams 20 motor grader conversion was put on an International Harvester I-12 industrial wheel tractor. In April 1932 was the introduction of No. 301 motor grader conversion of McCormick-Deering I-30 wheel tractor, single axle version. January 1934 brought on the No. 401 motor grader conversion of McCormick-Deering Model 30 wheel tractor, tandem axle dual-wheel. In 1936 the No. 17, No. 151 and No. 301 motor grader conversion of the McCormick-Deering I-30 wheel tractor. No. 301 was single-axle. By 1943 J. D. Adams was using International Harvester power units on their 412 and 412H motor grader.

In 1901, **F. C. Austin Manufacturing Company and Western Wheeled Scraper Company**, which until then had been fierce competitors, formed a selling corporation called Austin-Western Road Machinery Company, with offices in Chicago, Illinois, to market their products. Western Wheeled Scraper purchased the F. C. Austin Manufacturing Company in 1902, renaming it Austin Manufacturing Company, and the three companies operated until 1934. Their exact relationship to one another during these years is uncertain. Austin and Western products were manufactured and sold under those names, although the Austin-Western name also appeared on machinery, especially in the early 1930s. In 1934, the two manufacturing companies were consolidated under the name Western-Austin Company, with Austin-Western as a wholly-owned subsidiary; the Austin-Western name was in standard use on the equipment after the merger, although the Western-Austin name also occasionally appeared in conjunction with Austin-Western. Also in 1934, the Austin-Western Road Machinery Company moved from Chicago to Aurora, Illinois, and manufacturing operations were consolidated in Aurora in 1939. In May of 1971 the Clark Equipment Company purchased only the Construction Equipment Division from Greyhound. This consisted of the Austin-Western Division of Aurora, Illinois; the Lima Division of Lima, Ohio; and the Division of BLH Canada located at St. Thomas, Ontario, Canada. Clark went on to phase out the Austin-Western name in the mid-1970s, consolidating the line into its Crane Division, and then moving production of graders – the last survivor of the line – to the former Hancock Manufacturing Company plant in Lubbock, Texas in 1978. The Lubbock plant was closed and the grader line discontinued in 1981. Austin-Western sales literature shows a motor grader



conversion for a #32 International grader attachment for McCormick-Deering 10-20 agricultural or 20 industrial wheel tractors.

Gilbert Manufacturing Company was based in Aberdeen, South Dakota, according to one piece of literature and Stillwater, Minnesota according to another. It is known from online books to have been in business in 1917. Nothing else is known about its history. Gilbert Manufacturing Company sales literature discusses Universal motor grader conversion for McCormick-Deering and Fordson industrial wheel tractor, and cab for Fordson.

According to some information found in the archives **Champion** built the first horse-drawn grader in 1875 and later the first motor-driven grader. The company started in America back in 1875. The Canadian company originated in 1892 when "Copp Brothers" acquired the Canadian rights to manufacture & sell "Champion" graders in Canada. The first model being the Steel Champion Grader in 1895, this being a Horse draw machine built of all steel construction. The Copp brothers were bought out in 1897 and the company changed to the "Good Roads Machinery Company". The original American company taking control in 1909, with the firm being known as the "American Road Machinery Company of Canada Ltd". In the American depression of the 1920 the companies parted, and became "The Dominion Road Machinery Company". The Canadian firm was unaffected by this because of its separate charter, and continued to build road graders under the Champion name until it was renamed Champion Road Machinery Company Ltd. in 1977. It operated under this name until it was acquired by Volvo Construction Products in 2001. The former Champion plant in Goderich, Ontario is still in operation as Volvo Motor Graders Ltd., a division of Volvo. A powered model based on the McCormick-Deering tractor was launched in 1928, called the "powered Maintainer". A Hydraulic operated version the "Hydraulic Powered Maintainer" was launched in 1936 and with dual tandem drive (6x4) in 1939. Then introduced blade lift for bank trimming in 1946. Even though I couldn't find a picture I am sure their first grader used a 10-20 chassis.

The **M-B (Meili-Blumberg)** Power Grader was built in New Holstein, Wisconsin. The factory was started in 1907 and is still in business today building sweepers, pavement markers and airport snow removal products. They built the PG-10 with the M and MD tractors starting around 1948. Thanks to Jim & Christy Brewers from Minnesota for supplying me pictures from the M-B plant and a picture of their beautifully restored M-B on an M. Jim & Christy took their machine back to the plant for the 100 year celebration in 2007.

It was fun and interesting working on this article, thanks to everyone that helped. Darrell



Gilbert 10-20



American on M owned by Ted Bueneman, Troy, MO



M on a Trojan



F-30 Trojan



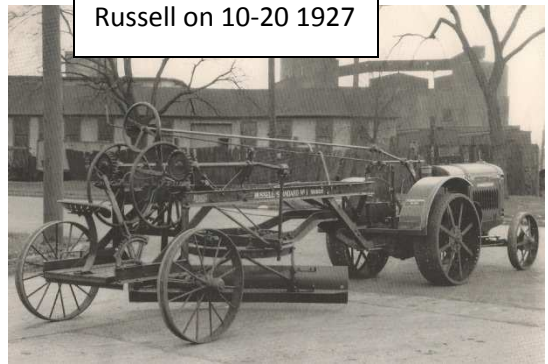
Wehr on 10-20 made in
Milwaukee, WI



1937 I-30
Galion



Russell on 10-20 1927



M-B on an M



Wehr front
view



!!! AUSTIN-INTERNATIONAL MOTOR GRADERS !!!



The 10-20 Model with canvas curtained cab.

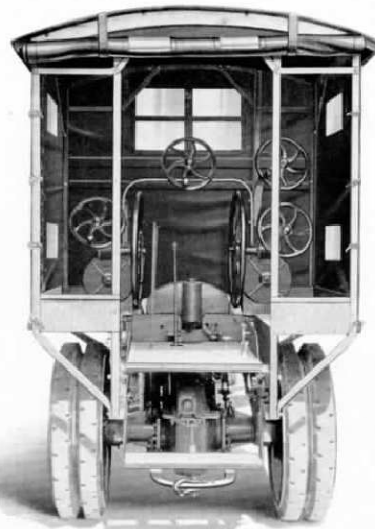
Cabs

A cab on such a machine as a motor grader is a decided convenience from many standpoints. In the North, motor graders are used as snow removal machines and the advantage of a weather-tight cab is therefore obvious. The operator is also much more comfortable in hot or dusty weather riding in a cab with the curtains rolled up or the doors and windows open, as the case may be.

All Austin cabs have steel uprights and tops which are light and strong, and yet do not make the machine top heavy. Two types of sides are furnished. The cab illustrated on this page has close fitting canvas curtains which protect the operator effectually when lowered and provide the maximum amount of ventilation when raised. When lowered the curtains overlap the sheet metal bottom plates sufficiently to insure against drafts. The curtain lights are so arranged as to give the operator a complete view of what is going on all around him. The front curtain is in two sections; the upper rolls up and down like those on the sides, while the lower is really a removable apron which is buttoned securely to the steel uprights and can be left in position when the upper section is rolled up as it does not interfere with the operating controls. The rear curtain is split vertically to make getting in or out both quick and easy.

The other type of cab has the same steel uprights and top, but instead of the canvas sides all steel ones with sliding glass windows and double rear doors which can be latched open. There is a one-piece windshield in front

which opens outward at the bottom and can be adjusted in several positions. This all-metal cab is naturally more airtight than the one with canvas sides.



Notice how completely the canvas curtains protect the operator from the weather and yet afford him a good view on all sides.

Austin



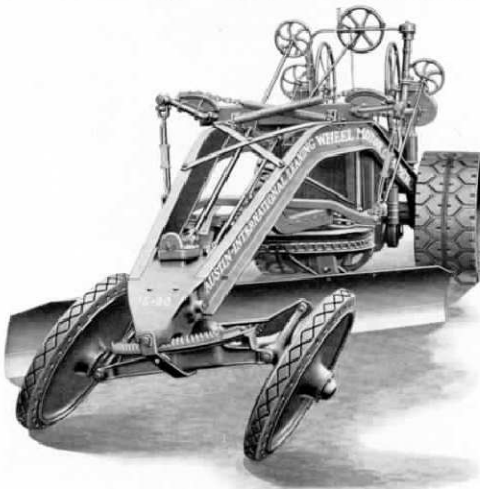
The 15-30 Model maintaining a hard, rough road. The leaning front wheels hold the machine to a straight course in spite of the heavy load on the blade.

Leaning Front Wheels

An Exclusive Austin Feature

THERE is one very striking difference between the operation of a one-man motor grader and of the ordinary horse or tractor drawn machine. The front end of the ordinary grader is kept from sliding sideways by

the team or tractor to which it is hitched; while the front end of a motor grader is not hitched to anything and will therefore slide sideways, if means are not at hand to prevent it, the instant the side draft becomes too great. The only practical way to prevent this side slippage is by leaning the front wheels in the opposite direction. That is why we were quick to provide leaning front wheels for Austin-International Motor Graders, and this exclusive feature is alone enough to account for their increased capacity and greater all-around efficiency.



Notice, in addition to the leaning front wheels and special front truck, the blade raising springs regularly furnished on the 15-30 Model.

On motor graders with straight front wheels, the antics of the front truck compel the operator to spend a large part of his time and energy trying to steer a straight course; and the only way he can do that with any reasonable degree of success is either by raising the blade or setting it at such a sharp angle that the amount of material moved or the distance it is moved are not great enough to cause the front wheels to skid. This obviously reduces the amount of work done by the machine and also makes it incapable of cutting off the hard high spots of an earth or washboard gravel road.

Austin-International Motor Graders can be supplied with straight front wheels if anyone insists upon having them, but the leaning wheels are worth so much more than their additional cost that it is hard to see how anyone would consider for a minute being without them.

CONSIDER THESE EXCLUS

GALION FEATURES

Heavy frame of 8" Channel weighing $21\frac{1}{4}$ lbs. per foot, thoroughly and strongly braced.

Cam and lever truck-type steering gear.

Galion deep-curved mouldboard with reversible blade, two cutting edges.

Spring-mounted operator's platform.

All controls within easy reach of operator.

Work within view of operator at all times.

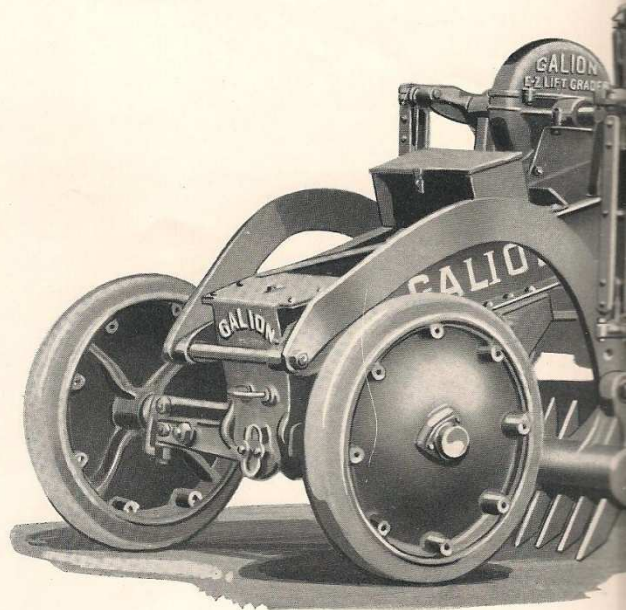
Alemite lubrication throughout.

Galion Patented E-Z Lift machine-cut worm and gear at bottom of oil-tight, dust-proof case operating in a bath of oil at all times. Heavy lift springs assist the operator in lifting the blade.

Entirely new type of bottom construction. Absolutely chatterless. Semi-circle is made of railroad rail steel, the strongest material available for the purpose.

GALION MOTOR C

Are the
Operating
Graders



SIVE GALION FEATURES

E-Z LIFT GRADERS

asiest-
g Motor
n the World

Thanks to Andrew
Dawson, Macon, MO



Galion McCormick-Deering E-Z Lift Motor Patrol Grader Complete with Rubber Tired
Wheels, Cab and Scarifier



2011 Cat grader with no steering wheel setting next to a Galion on a 1937 I-30 with no seat owned by Andrew Dawson, Macon, MO



Thanks to Jim & Christy Brewers

