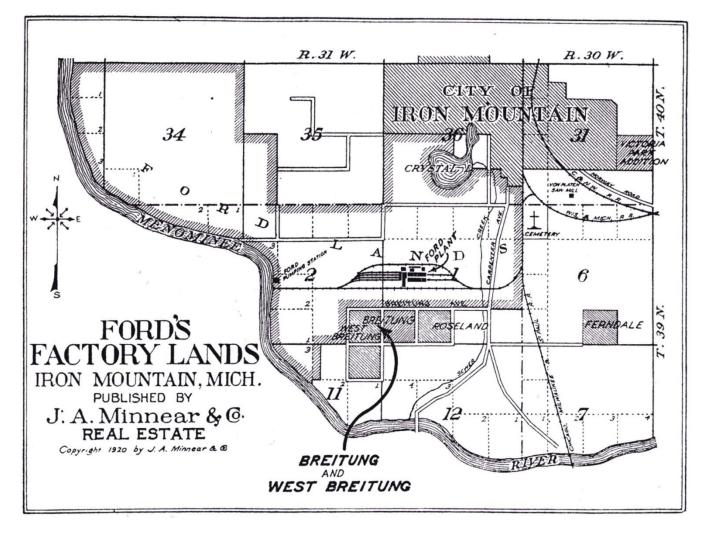
[Compiled and Captioned by William John Cummings]

KINGSFORD – FORD MOTOR COMPANY PLANT

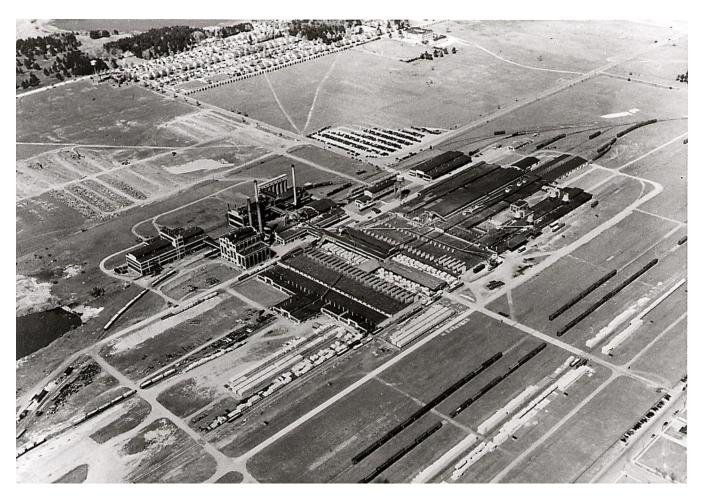
KINGSFORD

Chartered as a village December 29, 1923; chartered as a city August 5, 1947; named for Edward G. Kingsford, real estate agent and Ford dealer, married to Minnie Flaherty, cousin of Henry Ford I; Ford commissioned Kingsford to find a site upon which to establish an automobile plant in the Upper Peninsula which was located south of Iron Mountain.



Ford Motor Company Factory Lands in Breitung and West Breitung, 1920: This map of Ford's Factory Lands, Iron Mountain, Michigan, was published by J.A. Minnear & Co. in 1920. *[William John Cummings]*

AERIAL VIEWS OF THE FORD MOTOR COMPANY PLANT



Ford Motor Company Plant in Kingsford, Looking Northeast, ca. 1940-1950: This view of the Ford Motor Company's plant in Kingsford shows the plant with two trains south of the plant and Breitung Avenue at the lower right. Note the Ford Addition, including Kingsford High School and the southwest shore of Crystal Lake at the top left. *[Jack Deo, Superior View Studio]*

[Compiled and Captioned by William John Cummings]



Ford Motor Company Plant in Kingsford, Looking West, ca. 1940-1950: This view of the Ford Motor Company's plant in Kingsford shows the plant with several trains trains south of the plant at the left, with Breitung Avenue separating the plant property from the Breitung residential area. The Menominee River is visible at the upper left corner. The employee parking lot is visible at the lower right corner. [Jack Deo, Superior View Studio]

[Compiled and Captioned by William John Cummings]



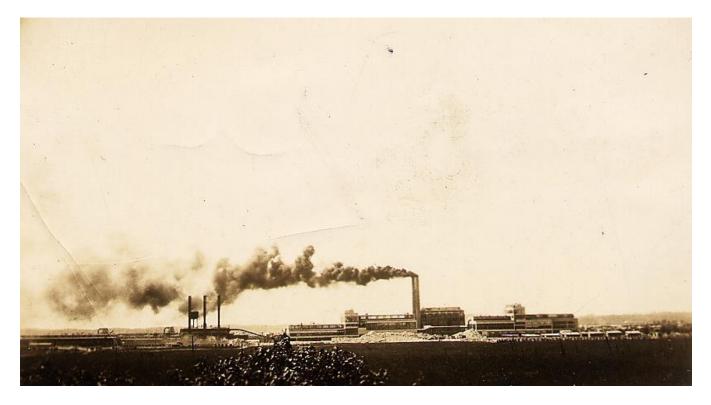
Ford Motor Company Plant in Kingsford, Looking North, ca. 1940-1950: This view of the Ford Motor Company's plant in Kingsford shows the complex and the southwest corner of the Ford Addition in the upper right corner. Note the parking lot just north of the plant in the Ford Field. *[Jack Deo, Superior View Studio]*

[Compiled and Captioned by William John Cummings]

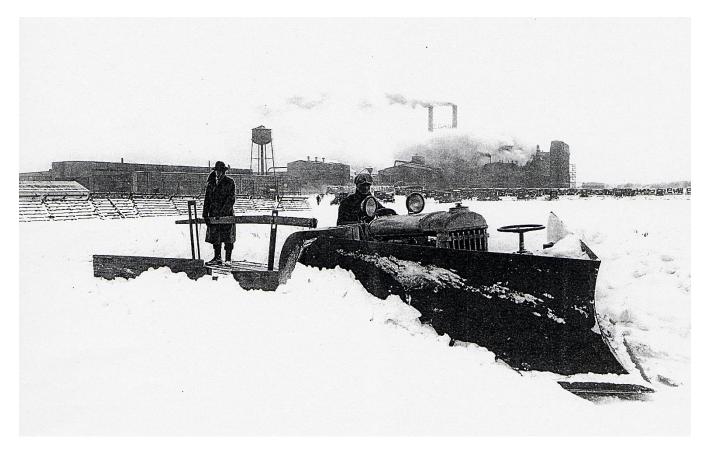


Ford Motor Company Plant in Kingsford, Looking Southeast, ca. 1940-1950: This aerial view of the Ford Motor Company's plant in Kingsford was taken looking southeast, showing Breitung Avenue in the background. In the left foreground were the distillation building and the carbonization building with the seven charcoal briquette storage silos. To the right was the new power house with its twin smokestacks, the sawmill complex, and the original power plant with the water tower just to the south. The building with "Ford Iron Mountain" on its roof is the maintenance building. The three body plants, No. 1, No. 2 and No. 3 (from left to right) were south of the maintenance building and the dry kilns were west of the body plants and south of the sawmill and the new power house. *[Menominee Range Historical Museum]*

GENERAL VIEWS OF THE FORD MOTOR COMPANY PLANT IN KINGSFORD, DICKINSON COUNTY, MICHIGAN



[Compiled and Captioned by William John Cummings]



Ford Motor Company Plant in Kingsford, Looking Southwest, ca. 1925-1930: A Fordson tractor was pushing the snowplow on the northeastern side of the Ford Motor Company's plant in Kingsford. Note the cars in the parking lot behind the tractor. *[William John Cummings or Guy Forstrom]*

[Compiled and Captioned by William John Cummings]



Logs and Ford Motor Company's Saw Mill, Kingsford, ca. 1925-1930: This unused, tinted halftone postcard view, dating between 1925 and 1930, shows "Logs and Ford Motor Company's Saw Mill, Iron Mountain, Mich.," and was Number 10 in a series. Ford Wood Yard Fire – June 8-9, 1925 [William John Cummings]

[Compiled and Captioned by William John Cummings]



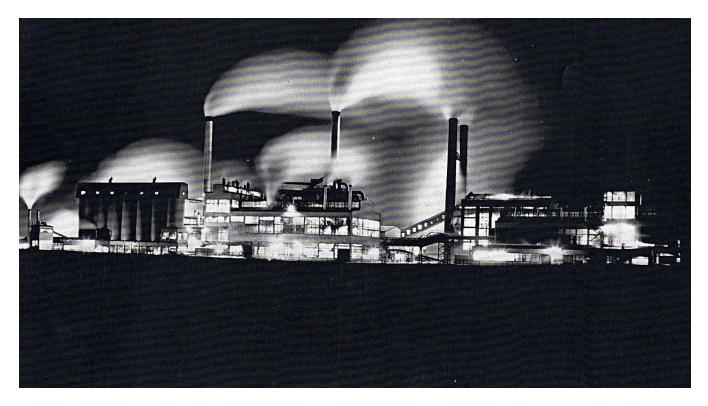
Partial View of the Ford Saw Mill, Power and Body Plants, Kingsford, ca. 1925-1930: This unused, tinted, halftone postcard view, dating between 1925 and 1930, shows a "Partial View of Ford Saw Mill, Power and Body Plants, Iron Mountain, Mich.," and is Number 5 in a series. Note the tall water tank near the power plant. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



Partial View of the Ford Saw Mill, Power and Body Plants, Kingsford, ca. 1925-1930: This unused, tinted, halftone postcard view, dating between 1925 and 1930, shows a "Partial View of Ford Saw Mill, Power and Body Plants, Iron Mountain, Mich.," and is Number 5 in a series. Note the tall water tank near the power plant. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



Spectacular Night View of Ford Motor Company Plant in Kingsford, ca. 1945-1951: This spectacular night view of the Ford Motor Company's plant in Kingsford was taken by Walter G. Nelson, who was general manager from 1945 until the plant closed in 1951. With the camera facing south, the following buildings are visible, from left to right: the seven charcoal briquette storage silos, the carbonization building (and the sawmill behind it), the power house with its twin smokestacks and the distillation building in front of the new power house. *[Menominee Range Historical Museum]*

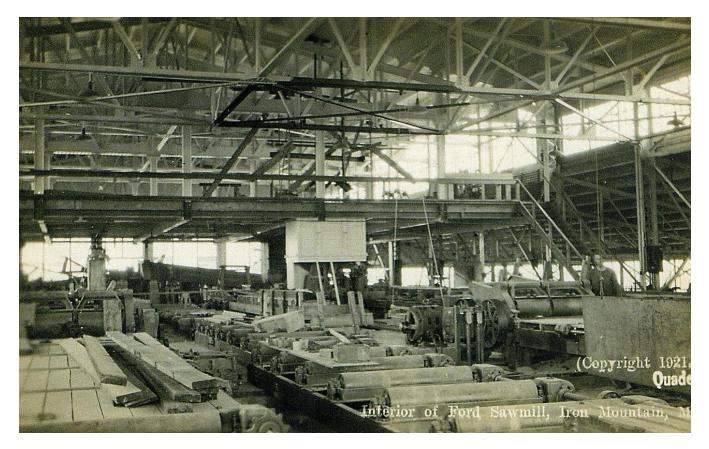
[Compiled and Captioned by William John Cummings]

FORD MOTOR COMPANY SAW MILL



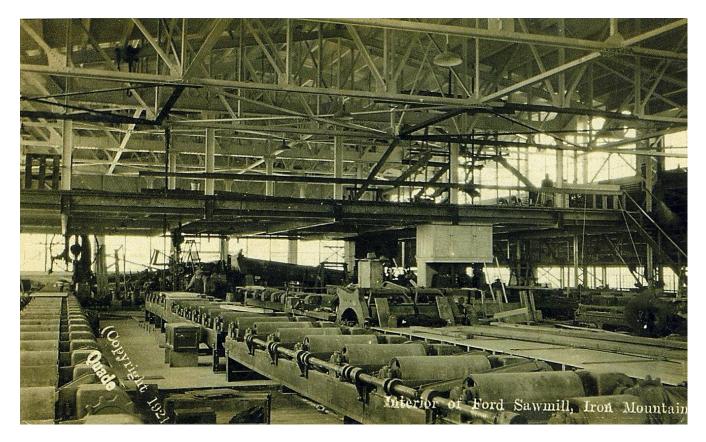
Ford Motor Company Plant, Construction of the Saw Mill, Late Summer, 1920: Construction of the Ford Motor Company's plant in what was to become Kingsford began July 29, 1920. The machinery for mixing concrete had arrived five days earlier. On August 3 work began on the foundations of the saw mill, measuring 200 feet long and 125 feet wide. By August 19 the foundation work was almost finished and structural work was about to begin. The cost of the mammoth mill was estimated at \$250,000. The exterior of the saw mill, pictured here, was completed around December 4. Thus, this photograph must have been taken in late summer or early fall of 1920. Note the Model T Ford at the right and the framework for the power plant at the extreme right. The first carload of logs for the sawmill arrived November 30, and it was anticipated that ten million feet of logs would be unloaded at the Ford property before the winter was over. The saw mill was formally opened on Tuesday, July 12, 1921. Note the steel framework to the right of center for the first power house. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



Interior of the Ford Motor Company's Saw Mill in Kingsford, 1921: This unused postcard view of the Interior of Ford Sawmill, Iron Mountain, was taken by Albert Quade in 1921, possibly shortly after it opened in July. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



Interior of the Ford Motor Company's Saw Mill in Kingsford, 1921: Postmarked Iron Mountain, Mich., November 13, 1926, this Interior of Ford Sawmill, Iron Mountain, was taken by Albert Quade in 1921, possibly shortly after the sawmill opened in July. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]

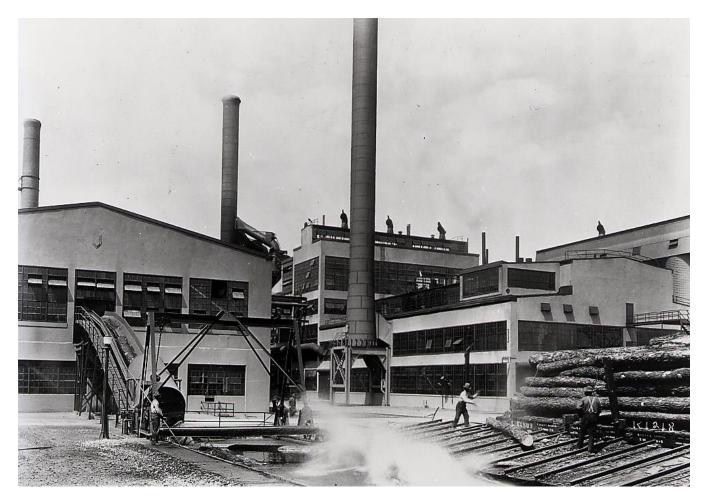


Ford Motor Company Saw Mill, Kingsford, ca. 1921-1930: This early view of the Ford Motor Company Saw Mill in Iron Mountain could predate the establishment of the Village of Kingsford. *[William John Cummings]*

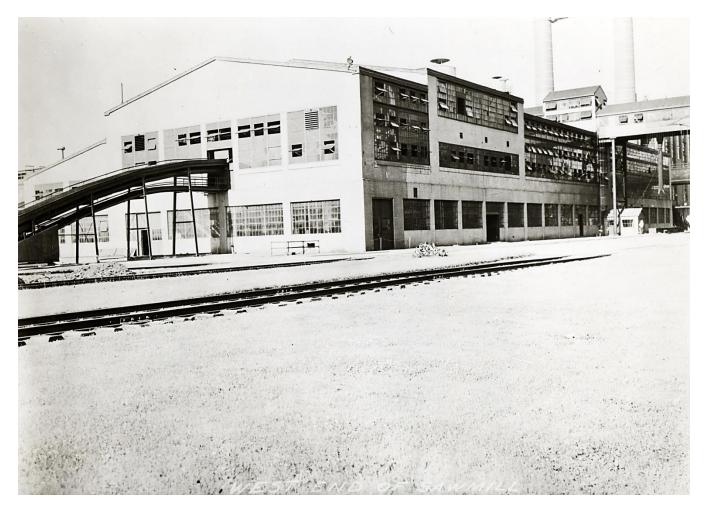


Ford Motor Company Sawmill and Hot Pond, Kingsford, January 30, 1924:

[Compiled and Captioned by William John Cummings]

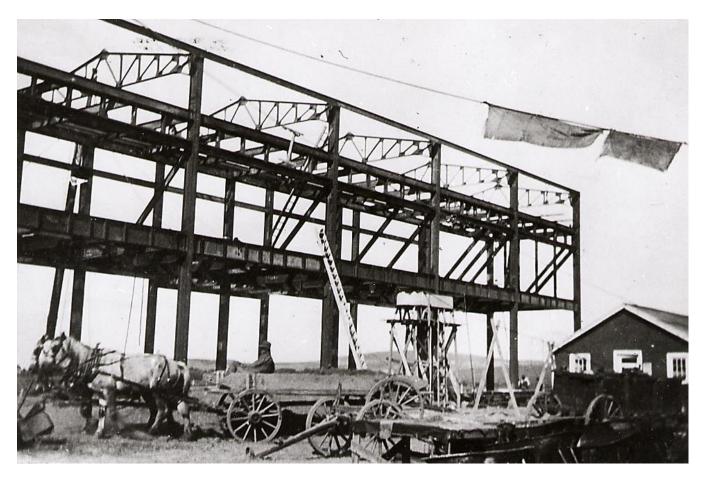


Ford Motor Company Sawmill and Hot Pond, Kingsford, ca. xxxx: The company's main logging camp was at Sidnaw, 60 miles northwest of Iron Mountain. During the first year only about a million board feet of logs were taken to Iron Mountain from Sidnaw. The company's goal at the saw mill was to cut 250,000 feet per day. On February 17, 1922, the sawmill crew cut 205,000 feet in sixteen hours. Over the weekend of March 18-19, 1922, the day and night shifts combined cut 273,000 feet in sixteen hours. The building to the right of the saw mill was the carbonization building, a portion of the chemical plant. [Menominee Range Historical Museum]



Ford Motor Company Sawmill, West End, Kingsford, ca. xxxx: [Menominee Range Historical Museum]

FORD MOTOR COMPANY POWER HOUSES

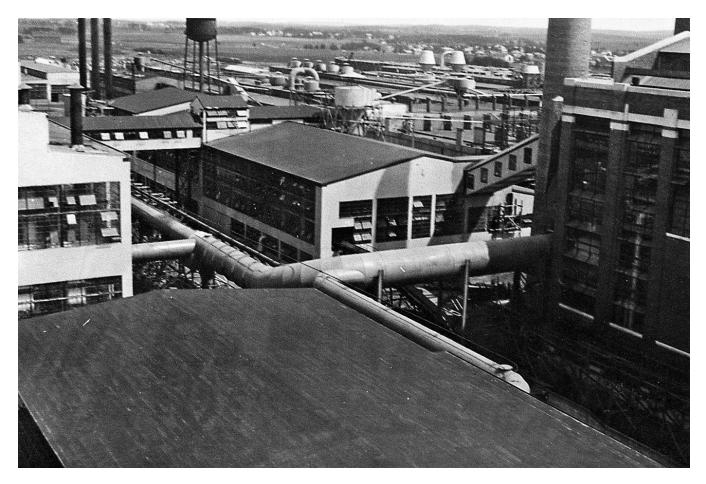


Ford Motor Company Plant, Construction of the First Power House, Late Summer, 1920: Work on the power house foundations, measuring 250 feet long and 40 feet wide, also began August 3, 1920. The walls above ground of both the power house and the saw mill were constructed of stucco on steel frames with steel reinforced concrete supporting columns. The power house was to furnish power for the saw mill and body plant. By June 8, 1921, two of the four Wickes boilers were in place and nearly bricked in, and work on the other two was started. The plans called for eight boilers with a total capacity of 2,400 horsepower – 300 from each unit. There was considerable delay in receiving a newly-designed Ford turbo-generator which would best supply the needed power. The turbine was first tested on site on December 5. A second and finally a third turbo-generator were installed, the last one arriving in early February, 1922. The three units would give the power plant a capacity of about 3,000 horsepower and would enable one unit to be kept in reserve as insurance against stoppage of operations due to a breakdown. Note the horse-drawn wagon. *[William John Cummings]*



Original Power House, Water Tank, Kingsford, The sprinkler water tank, bearing the famous Ford logo, had a capacity of 100,000 gallons and stood next to the original power house building. Behind the power house was the sawmill, and behind the sawmill was the new power house with its pair of huge smokestacks. The carbonization building can be seen between the original power house and the seven huge charcoal briquette storage silos which were under construction by mid-February, 1925. Each silo, built of concrete and steel, measured 22 feet in diameter, was 71 feet high and had a capacity of 150 tons. *[Jack Deo, Superior View Studio]*

[Compiled and Captioned by William John Cummings]



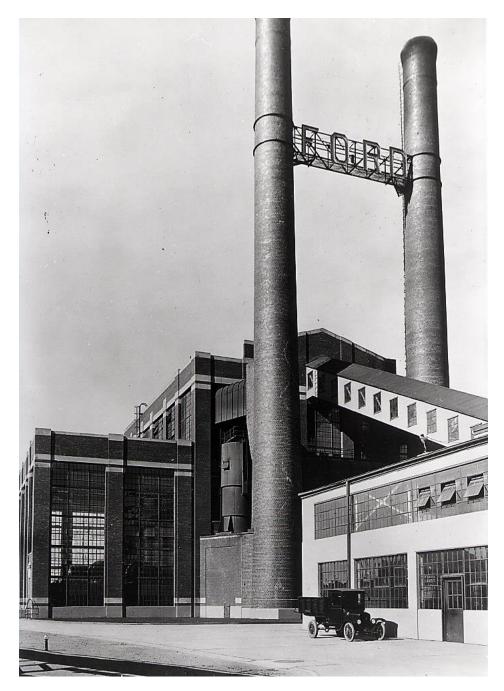
Saw Mill and Power House from the Rooftop of the Distillation Building, Ford Motor Company Plant, Kingsford, August, 1924: [Guy Forstrom]

[Compiled and Captioned by William John Cummings]



Ford Motor Company, Kingsford, ca. XXXX: This postcard view shows a shipment of horizontal flue pipe used at the Ford Motor Company's plant in Kingsford, manufactured by the Lake Shore Engine Works of Marquette, Michigan. *[Guy Forstrom]*

[Compiled and Captioned by William John Cummings]



Ford Power House with Smokestacks, ca. 1924-1925: This view shows the power house which replaced the original power plant which had been constructed during the fall and winter of 1920-1921. The second power plant, an imposing structure built of steel and red face brick inset at various places with white stone, stood out from the rest of the plant buildings due to its size and beauty and was centrally located with respect to the sawmill, wood drying kilns and the two buildings of the wood distillation plant.

Four boilers, each rated at 1,361 horsepower and capable of a 250 per cent overload, had a combined capacity of 12,000 horsepower, more than four times that of the old plant. These new boilers burned oil, wood and other refuse. Between the new power house and the new addition to the sawmill (where the early Ford truck is parked in this photograph), a steel bridge

[Compiled and Captioned by William John Cummings]

slanted upward at a sharp angle and contained a runway and exhaust pipes conveying sawdust from every part of the plant for use as fuel in connection with the oil.

Two 190-foot high smokestacks with an inside diameter of 14 feet at the bottom and 10 feet at the top were connected to these boilers. By October, 1923, one boiler was being water tested at the new plant, then still under construction. By June 2, 1924, construction work was almost completed.

The two smokestacks from the "new" power house stood as sentinels over the remains of the Ford Plant from September 8, 1961 until they were felled at 12:10 p.m. on Friday, September 13, 2003. Hundreds witnessed their fall in Kingsford's Industrial Park, many lamenting a loss of part of our heritage. *[Menominee Range Historical Museum]*

The Iron Mountain News, Iron Mountain, Dickinson County, Michigan, Volume _____, Number _____ [Friday, September 8, 1961], page ____, column ____

OLD FORD WHISTLE LAST BLAST TONIGHT

Tonight at 9 o'clock, the Twin Cities of Iron Mountain and Kingsford will lose a 40-year-old alarm clock.

Tonight, the old Ford plant whistle, which has been blowing six times a day since 1921, will sound its last blast.

The 9 o'clock blast which will last for about two minutes, *[sic]* will be the death knell of the Kingsford company, which is moving to Kentucky.

The old Ford "alarm clock" has been waking up residents of the Twin Cities at six each morning since 1921. This has been followed by a 7 o'clock whistle, starting time at the plant.

The next blast was at 11, lunchtime, followed by a 11:30 back to work whistle. At 3:30 has been the quitting time whistle.

The sixth has been the nine o'clock blast[,] supper time for the night shift.

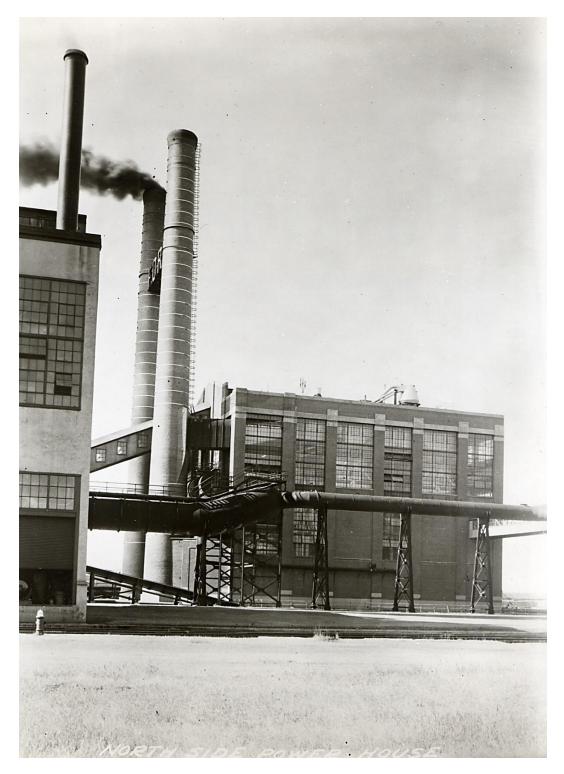
The lay-off process of the 356 employes [*sic* – *employees*] at the Kingsford plant, which took over Ford operations in 1951, has been completed. Almost an even 300 have been given their notices and are without jobs. About 55 will remain at the plant for at least several months to take care of dismantling.

[Compiled and Captioned by William John Cummings]

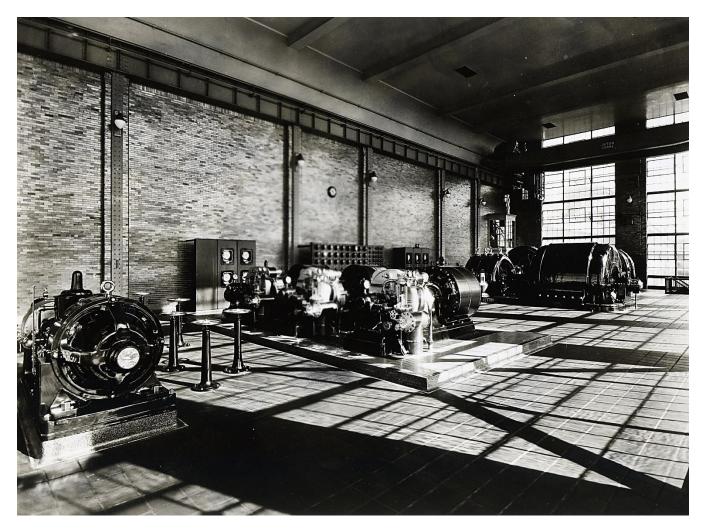


Ford Power House Sub-Station, Looking West, Ford Motor Company, Kingsford, ca. xxxx: [Menominee Range Historical Museum]

[Compiled and Captioned by William John Cummings]



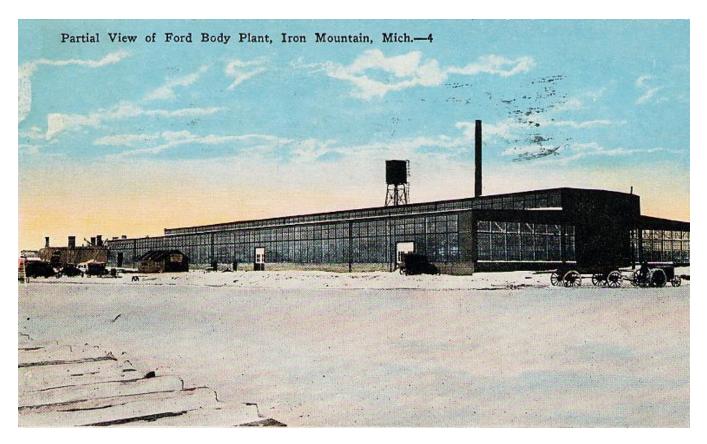
Ford Power House, North Side, Ford Motor Company, Kingsford, ca. xxxx: [Menominee Range Historical Museum]



Interior of Ford Motor Company Power House, Kingsford, ca. xxxx: [Menominee Range Historical Museum]

[Compiled and Captioned by William John Cummings]

FORD MOTOR COMPANY BODY PLANTS



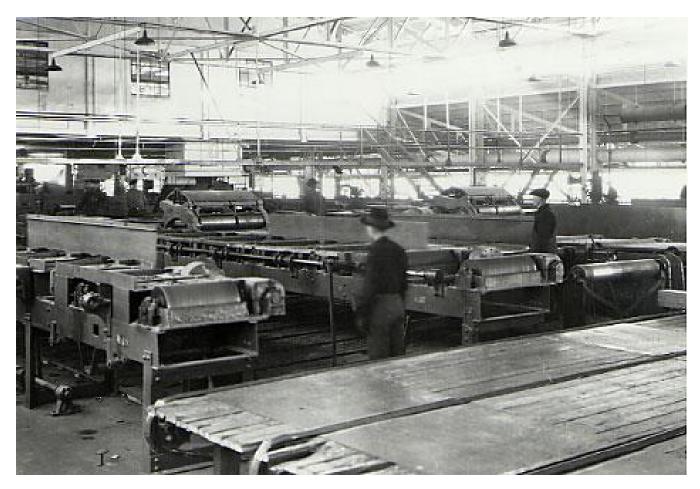
Partial View of Ford Body Plant, Kingsford, ca. 1929: Postmarked Iron Mountain, Mich., August 8, 1929, this tinted postcard view shows a "Partial View of Ford Body Plant, Iron Mountain, Mich.," and is Number 4 in a series. Note the wagon being pulled by a tractor at the right. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



Ford Motor Company Body Plant Under Construction, Kingsford, August, 1924: This early view shows the body plant under construction. Note the horizontal flue pipe on the roof at the left awaiting installation. Waste heat was siphoned off of the power house and used in the kilns for drying, and in the Distillation and Carbonization Building for wood processing. *[Guy Forstrom]*

[Compiled and Captioned by William John Cummings]



Interior View of a Body Plant at Kingsford's Ford Motor Company, ca. 1925: This interior of one of the three body plants constructed at Kingsford's Ford Plant was probably taken in the mid-1920's. The Worden-Allen Company of Chicago was awarded the contract for the first body plant, measuring 360 x 120 feet, and six dry kilns on September 15, 1921. The plant machinery started up March 10, 1922, turning out pillars for touring cars. The manufacture of other parts, including sills, door frames, floor boards and top ribs, was taken up later. The first shipment of several thousand front door pillars for the touring car model occurred March 15. 1922. Plans and specifications for a second body plant, measuring 460 by 120 feet and a 100foot addition to the first body plant, as well as 14 additional dry kilns, were announced May 29, 1922. The Worden-Allen Company was awarded the contract on June 17 and began construction on July 10. This body plant was connected to the dry kilns, thus not exposing the lumber to the weather, and was constructed of concrete, glass and steel. The second construction project was completed in November. On April 21, 1923, a contract was awarded to the Worden-Allen Company for the construction of 32 additional dry kilns, a third body plant, measuring 640 by 120 feet, and extensions to the other two body plants of 180 feet each to make all three plants of equal size. Construction began May 10. The additions to the first two body plants and the construction of a maintenance building were completed by September 1, and by December 19 the two body plants were operating at full capacity. Because of a lack of power, the third body plant was not put into full operation until March of 1924. Twenty-six dry kilns were in operation by January 16, 1924. Twenty-six more were under construction during that year. Each kiln required seven miles of piping, the total piping in all the kilns and the

[Compiled and Captioned by William John Cummings]

plants sufficient to have reached to Chicago and back if placed end to end. Each concrete kiln was 220 feet in length and 20 feet wide. A single order for the kilns placed in May 26, 1922, filled 60 or 70 railroad cars. *[Michigan State Archives]*



Ford Motor Company Plant, Wooden Parts Production Line, ca. :



Ford Motor Company Body Plant, Looking West, Kingsford, ca. xxxx: [Menominee Range Historical Museum]

[Compiled and Captioned by William John Cummings]



Ford Motor Company Station Wagon Body Ready for Shipment, Kingsford, ca. 1940-1949: [Menominee Range Historical Museum]

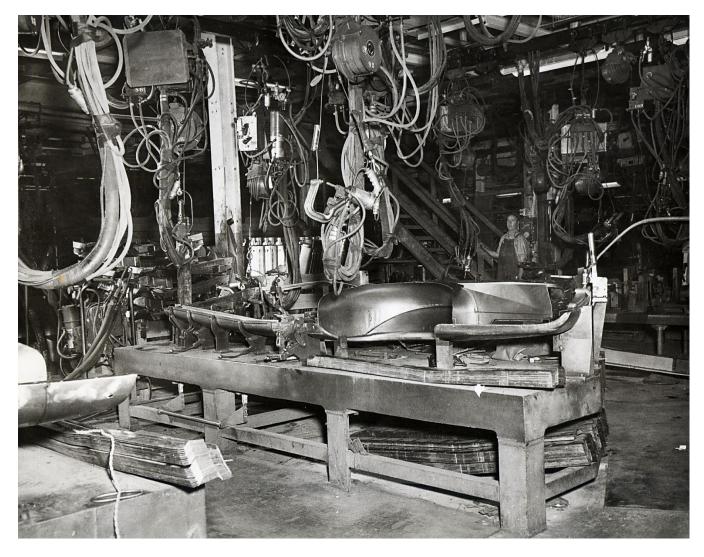
[Compiled and Captioned by William John Cummings]



Ford Motor Company, View of Hi-Frequency Press Units for Wood Pillar Production, Kingsford, ca. 1949: [Menominee Range Historical Museum]



Ford Motor Company, View of Welding Sub-Assemblies, Kingsford, ca. 1949: [Menominee Range Historical Museum]



Ford Motor Company, View of Quarter Panel Assembly Fixture, Kingsford, ca. 1949: [Menominee Range Historical Museum]

[Compiled and Captioned by William John Cummings]



Ford Motor Company Body Plant, View of Assembly Buck, Kingsford, ca. 1949: [Menominee Range Historical Museum]

[Compiled and Captioned by William John Cummings]



Ford Motor Company Body Plant, View of Metal Body Assembly Line, Kingsford, ca. 1949: [Menominee Range Historical Museum]

[Compiled and Captioned by William John Cummings]

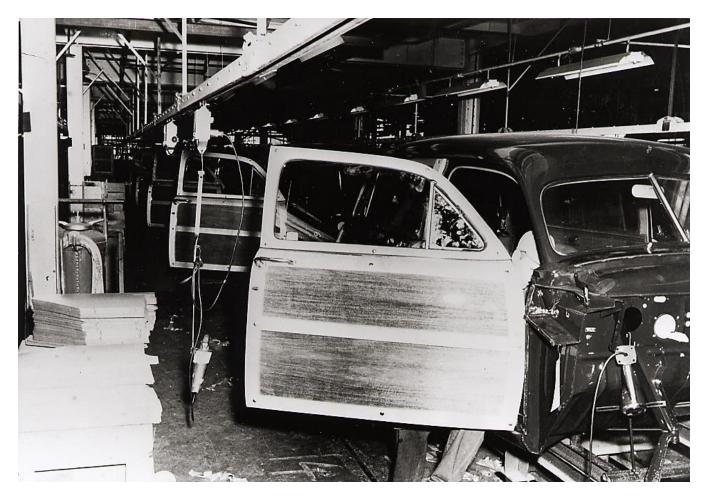


Ford Motor Company Body Plant, View of Metal Finish Line, Kingsford, ca. 1949: [Menominee Range Historical Museum]



Ford Motor Company, View of Trim Line, Kingsford, ca. 1949: [Menominee Range Historical Museum]







Ford Motor Company, View of Post-War Model Station Wagon, Kingsford, ca. 1949: [Menominee Range Historical Museum]



Ford Motor Company, View of Post-War Model Station Wagon, Kingsford, ca. 1949: [Menominee Range Historical Museum]



Ford Motor Company, View of Post-War Model Station Wagon, Kingsford, ca. 1949: [Menominee Range Historical Museum]

FORD MOTOR COMPANY CARBONIZATION BUILDING



Ford Motor Company Carbonization Building, Kingsford, July 14, 1924: Taken July 14, 1924, this photograph shows the Ford Plant saw mill at the left and the carbonization building at the right.

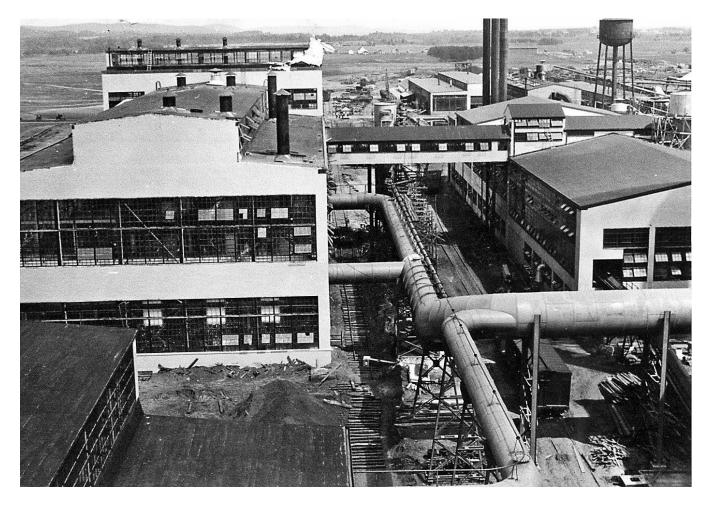
The Ford Motor Company announced it was considering the construction of a chemical plant to take care of the waste slashings from the timber operations on December 29, 1922. The chemical plant, composed of two main buildings, each with four-story and six-story sections, was *[sic – were]* located north of the saw mill with the buildings extending westward. The contract was awarded to the Worden-Allen Company of Chicago on April 16, 1923. The machinery and equipment of the completed chemical plant was tested August 1, 1924, and by September 27 was operating on a big scale.

The carbonization building, where the chemical process started, was 360 by 90 feet. The distillation building, where the chemical products were made, was 300 by 90 feet. The buildings were furnished with heat by a steam power plant, a unique feature of which was a horizontal smokestack 10 feet in diameter and more than 200 feet long which connected the two big buildings and furnished heat for wood drying. The plant was equipped with a large chemical laboratory of the latest design. There was also a modern shipping and barreling department for the proper packaging of the various chemical products.

Every scrap of wood was used – even sawdust. The plant's capacity was 210 cords of wood per day and the amount of daily waste products at the time was calculated to be worthy \$11,000. The chemical distillation plant reclaimed from every ton of scrap wood 135 pounds of

[Compiled and Captioned by William John Cummings]

acetate of lime, 61 gallons of 82 per cent methyl alcohol, 610 pounds of charcoal, 15 gallons of tar, heavy and light oils, creosote and 600 cubic feet of fuel gas. All the products were used at the Ford Plant or sold. The charcoal was manufactured into briquettes and offered on the market for fuel. The gases were used for fuel at the power plant. *[Menominee Range Historical Museum]*

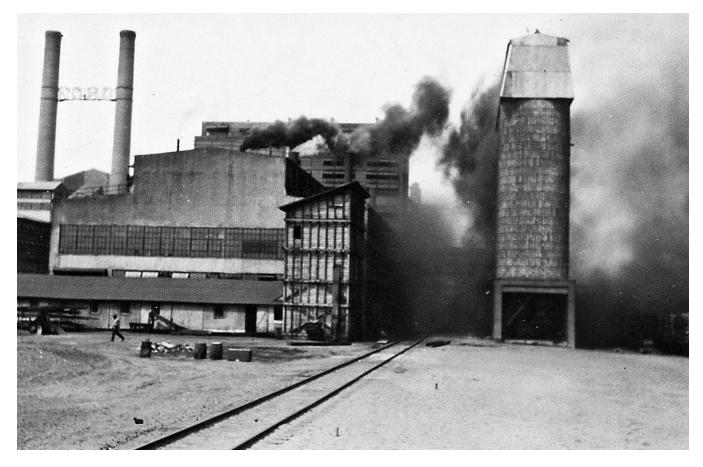


Ford Motor Company Carbonization Building and Saw Mill, Kingsford, August, 1924: This early view of the Ford Motor Company's Carbonization Building and Saw Mill in Kingsford shows the horizontal flue pipes after they were installed to siphon the waste heat from the power house to the kilns for drying and to the Distillation and Carbonization Building for wood processing. *[Guy Forstrom]*

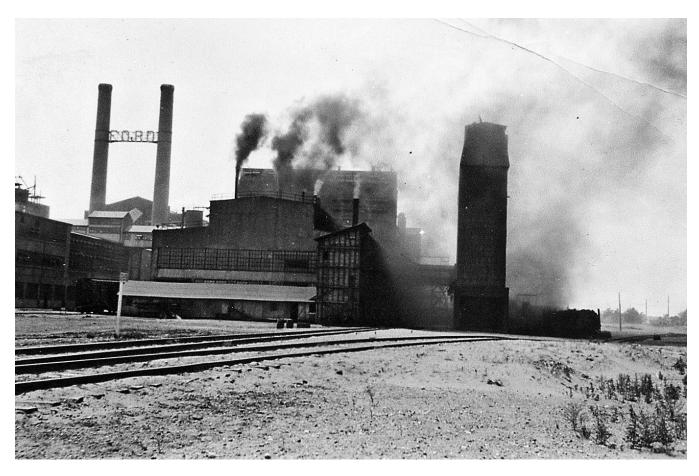


Ford Motor Company Carbonization Building and Silos, Kingsford, June 30, 1925 at 10:00 a.m.: [Guy Fostrom]

[Compiled and Captioned by William John Cummings]



Ford Motor Company Carbonization Building and Silos, Kingsford, June 30, 1925 at 10:45 a.m.: [*Guy Fostrom*]



Ford Motor Company Carbonization Building and Silos, Kingsford, June 30, 1925 at 1:00 **p.m.:** [Guy Fostrom]



Ford Motor Company, North End of Carbonization Building and Chemical Plant, Kingsford, ca. xxxx: [Menominee Range Historical Museum]



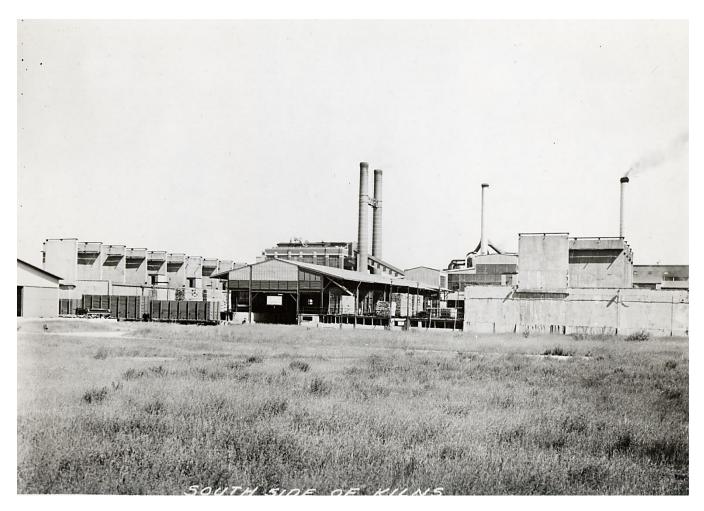
Ford Motor Company, East End of Carbonization Building, Kingsford, ca. xxxx: [Menominee Range Historical Museum]

FORD MOTOR COMPANY CHEMICAL BUILDING



Ford Motor Company, Chemical Building, Bagging Ford Charcoal Briquettes, Kingsford, ca. xxxx: Workers are filling bags with charcoal briquettes, one of the by-products of the Ford Motor Company's manufacturing plant in Kingsford. After Ford left, the manufacture of briquettes continued under the brand name Kingsford Charcoal Briquettes. *[Jack Deo, Superior View Studio]*

FORD MOTOR COMPANY DRY KILNS



Ford Motor Company, South Side of Kilns, Kingsford, ca. xxxx: By early March, 1924, there were a total of 52 dry kilns at Kingsford's Ford Plant, making this the largest battery of dry kilns on earth at the time. Each kiln was 222 feet long and 20 feet wide, with doors 12 feet high. Body parts were loaded on specially designed trucks, each with a capacity of 1,122 cubic feet. A kiln held 36 trucks, making the total capacity of each kiln 40,392 cubic feet of body parts. The kilns were kept full all the time. Every time a truck was taken out another was pushed in.

Accurate records were kept of each truckload and the truck was not removed until an analysis showed the moisture content properly reduced. Green wood contains about 40% water which was dried down to 7% before leaving the kiln. Drying took about twenty days, with the estimated evaporation per kiln of 13,000 pounds every twenty-four hours. This photograph shows the kilns and stacked lumber. The new power house and a portion of the saw mill can be seen in the upper right. *[Menominee Range Historical Museum]*

FORD MOTOR COMPANY MACHINE SHOP



Ford Motor Company, View of Machine Shop, Kingsford, ca. xxxx: [Menominee Range Historical Museum]



Ford Motor Company, View of Boring Mill (Machine Shop), Kingsford, ca. xxxx: [Menominee Range Historical Museum]

FORD MOTOR COMPANY MAINTENANCE BUILDING



Ford Motor Company Maintenance Building "M", View from Southwest Corner, Kingsford, ca. xxxx: [Menominee Range Historical Museum]

FORD MOTOR COMPANY CAFETERIA AND DINING ROOM



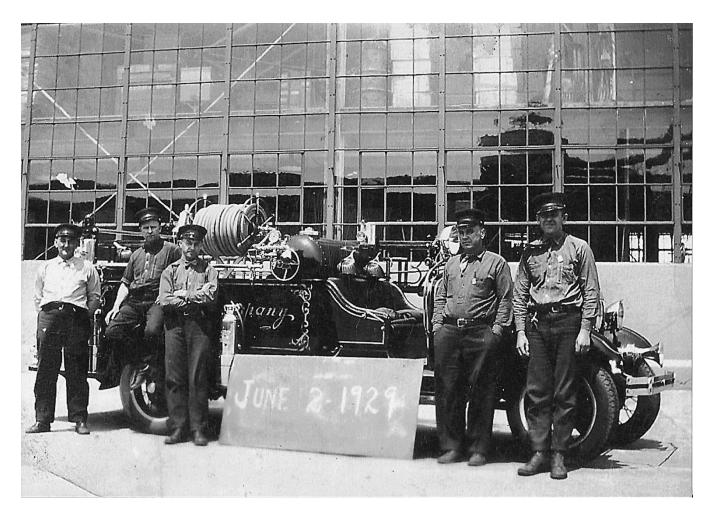
Ford Motor Company, View of Service Counter from Cafeteria Entrance North (Dining Room), Kingsford, ca. 1940: [Menominee Range Historical Museum]

[Compiled and Captioned by William John Cummings]



Ford Motor Company, View of South Dining Room, Kingsford, ca. 1940: The tables, chairs and picnic tables used in the cafeteria were made "in house" by Ford Motor Company employees. They used the same craftsmanship and solid maple as was used in the Woodie car bodies. *[Menominee Range Historical Museum]*

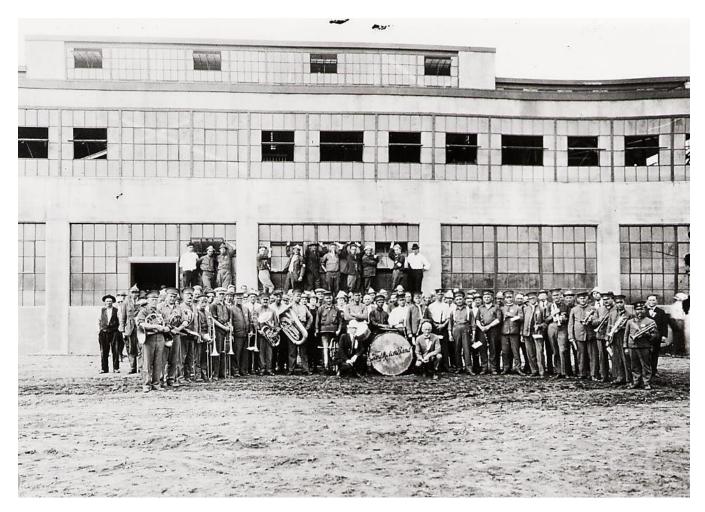
FORD MOTOR COMPANY FIRE DEPARTMENT



Ford Motor Company Fire Department, Ford Motor Company Plant, Kingsford, June 2, 1929: Members of the Ford Motor Company Fire Department at the Kingsford plant posed with the new LaFrance Fire Truck on June 2, 1929. [Guy Forstrom/Hazel Dault]

[Compiled and Captioned by William John Cummings]

FORD MOTOR COMPANY BAND



Ford Motor Company Band, Ford Motor Company Plant, Kingsford, ca. 1925: Kingsford's Ford Motor Company Band posed in front of one of the body plant buildings sometime in the mid-1920's. In addition to the band, there was a Ford Motor Company orchestra which played for the first time publicly on June 26, 1925, at the new Kingsford High School building. *[Dick Ferris/Gene Derwinski]*

FORD MOTOR COMPANY BASEBALL TEAM



Ford Motor Company V8 Baseball Team, Kingsford, 1936: The 1936 Kingsford V-8 baseball team consisted of (back row) Ray Handy, catcher; "Specks" Gober, pitcher; Ed Kritzer, manager; Eiano Juntanen, pitcher; Tom Lawrence, outfielder; (front row) "Irish" Wald, outfielder; Tony Caruso, pitcher, outfielder, first base; "Booze" Bowers, outfielder; George Schultz, third base; Eddie Raab, second base; and "Baldy" Anderson, third base. Mascot and batboy Bob O'Hearn is seated in front. [Jack Deo, Superior View Studio]

FORD HYDRO-ELECTRIC PLANT ON THE MENOMINEE RIVER



Ford Hydro-Electric Plant on the Menominee River, Kingsford, January 30, 1924: Exploratory work on the Ford Dam site began February 13, 1922. The awarding of the contract was held up for more than a year and a half mainly because the purchase of the lands which would be flooded by the backwater had not been completed. Some of the land owners were demanding a very high price for their lands.

On May 12, 1923, the Stone and Webster Company of Boston, Massachusetts, began construction. Meade and Seastone of Madison, Wisconsin, was the firm in charge of the engineering work. Great headway was made during the fall and early winter when extremely favorable weather conditions prevailed.

When this photograph was taken on January 30, 1924, work on the dam was progressing very rapidly. The buildings in the foreground were bunkhouses for the construction workers. The power house, to the left of the smokestack, measured 119 feet long and was on the eastern end of the dam which extended 240 feet across the Menominee River. The dam was constructed of a gigantic block of concrete more than 30 feet deep that was studded with ten huge iron gates. About 18,620 cubic yards of concrete weighing 78,204,000 pounds were used in its construction. The wing or core wall on the Michigan side was 175 feet long and on the Wisconsin side the wall measured 125 feet. The water held in check by the Ford Dam

[Compiled and Captioned by William John Cummings]

flooded land as far up the river as the Peninsular Power Dam at Twin Falls and made miniature Cowboy Lake into a much larger body of water.

Power from the dam was transported to the sawmill and body plant units through a system of underground conduits which carried 2,300 volts of direct current to a substation that converted the electricity to alternating current and stepped down the voltage to 220. [Michigan State Archives]

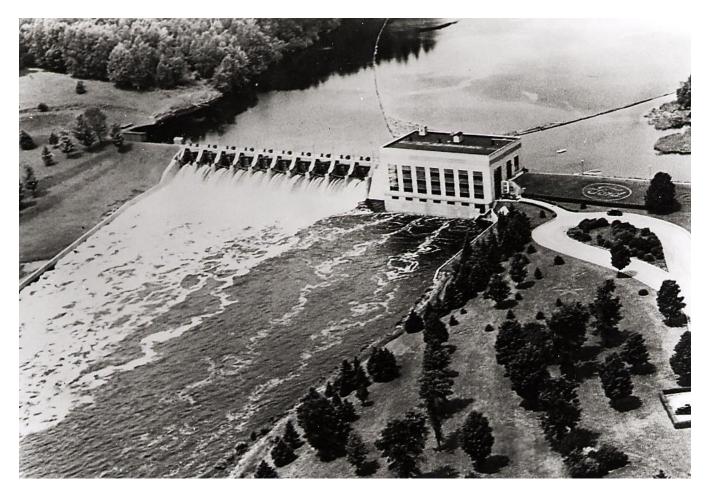


Ford Hydro-Electric Plant Dining Hall on the Menominee River, Kingsford, ca. 1923-1924: This building served as the dining hall for the crew working on the construction of the Ford Hydro-Electric Plant on the Menominee River in 1923-1924. *[Guy Forstrom]*



Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. xxxx: [Menominee Range Historical Museum]

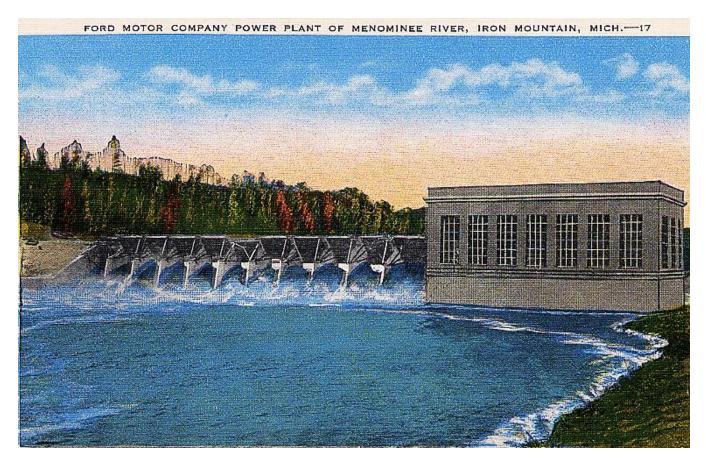
[Compiled and Captioned by William John Cummings]



Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. 1940-1950: The Ford Dam's three generators began revolving at the rate of 120 turns per minute, supplying 11,000 horsepower to the Ford Plant, on June 20, 1924, culminating two years of planning and construction. The dam was the largest power development on the Menominee River at the time, exceeding the output of the Peninsular Power Company's dam at Twin Falls because the flowage of the Pine River which enters the Menominee River between the two dams provided increased volume. Note the Ford logo in flowers on the berm to the right of the power house. [Jack Deo, Superior View Studios]



Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. 1940-1950: [William John Cummings]

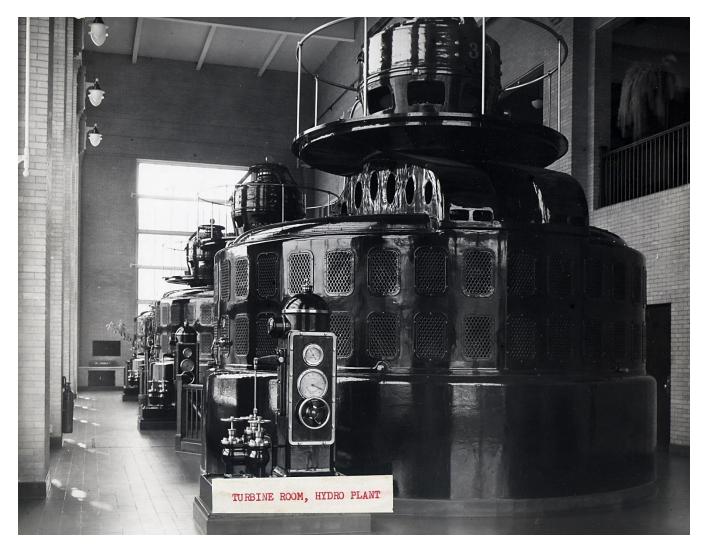


Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. 1930-1940: [William John Cummings]

[Compiled and Captioned by William John Cummings]



Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. 1948: Postmarked Pembine, Wis., July 24, 1948, this postcard view shows the power house and spillway of the Ford Hydro-Electric Plant on the Menominee River in Kingsford. *[William John Cummings]*



Ford Hydro-Electric Plant on the Menominee River, Turbine Room, Kingsford, ca. xxxx: [Menominee Range Historical Museum]

[Compiled and Captioned by William John Cummings]



Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. 1948: Taken from the doors leading into the power house, the landscaped grounds can be seen on this postcard view, postmarked Pembine, Wis., July 24, 1948. At the far left the word "Ford" was planted in flowers to imitate the famed company logo on a berm. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. 1940-1945: Taken from the doors leading into the power house, the landscaped grounds can be seen. At the far left the word "Ford" was planted in flowers to imitate the famed company logo on a berm. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



Ford Gardens at Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. 1953: The locally famed Ford Gardens at the Hyrdo-Electric Plant on the Menominee River were well-maintained and were popular with the public. An article in the *Iron Mountain News* on May 29, 1925, noted, "The premises surrounding the Ford hydro-electric plant, located west of the Ford factory, have been transformed into a beautiful garden." Plans for the work were drawn up by E.G. Kingsford and Wesley S. Lutey, landscape expert from Ishpeming. Lutey was also supervising the beautifying the lawn at the Ford club house on Woodward Avenue, and also had charge of landscape work on the grounds of Ford homes, occupied by employees. This postcard is postmarked Norway, Mich., September 4, 1953. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



Ford Gardens at Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. 1950-1955: The locally famed Ford Gardens at the Hyrdo-Electric Plant on the Menominee River were well-maintained and were popular with the public. An article in the *Iron Mountain News* on May 29, 1925, noted, "The premises surrounding the Ford hydro-electric plant, located west of the Ford factory, have been transformed into a beautiful garden." Plans for the work were drawn up by E.G. Kingsford and Wesley S. Lutey, landscape expert from Ishpeming. Lutey was also supervising the beautifying the lawn at the Ford club house on Woodward Avenue, and also had charge of landscape work on the grounds of Ford homes, occupied by employees. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



Rock Garden at Ford Hydro-Electric Plant, Kingsford, ca. 1940: The locally famed Ford Gardens at the Hyrdo-Electric Plant on the Menominee River were well-maintained and were popular with the public. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



Ford Gardens at Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. 1930-1940: The locally famed Ford Gardens at the Hyrdo-Electric Plant on the Menominee River were well-maintained and were popular with the public. *[William John Cummings]*

[Compiled and Captioned by William John Cummings]



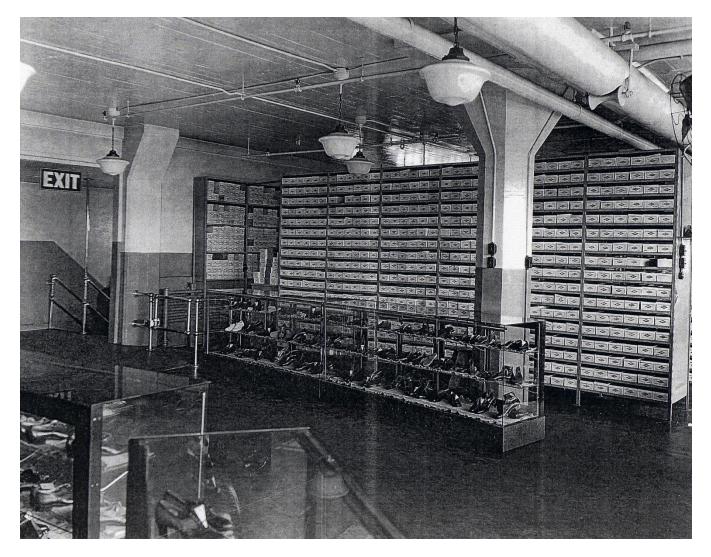
Ford Gardens at Ford Hydro-Electric Plant on the Menominee River, Kingsford, ca. 1940-1950: The locally famed Ford Gardens at the Hyrdo-Electric Plant on the Menominee River were well-maintained and were popular with the public. *[William John Cummings]*

FORD COMMISSARY, CARPENTER AVENUE



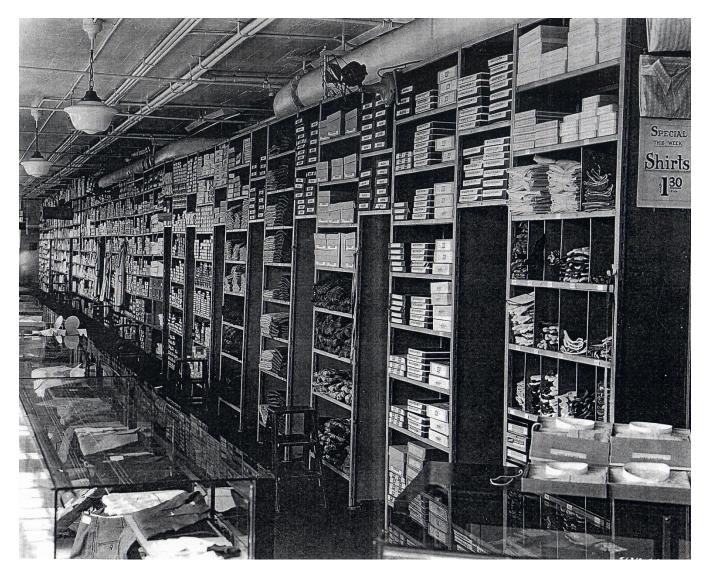
The Ford Commissary or the Ford Store, Located at the Southeast Corner of Woodward Avenue and Carpenter Avenue, Kingsford, ca. 1925-1930: The Ford Commissary opened Monday, November 13, 1922, at its location on the southeast corner of Carpenter and Woodward Avenues under the management of Richard E. Boll, who had been a businessman in Channing for many years. The single-story brick building measured 115 by 50 feet, and had a full basement which contained cooling rooms for storing fruits and vegetables. The store was stocked with staple and fancy groceries, men's and boys' working clothing, shoes, and fresh and salted meats. The facility was open to the general public as well as the employees of the Michigan Iron, Land & Lumber Company, later a part of the Ford Motor Company. [From the Collection of Henry Ford Museum & Greenfield Village]

[Compiled and Captioned by William John Cummings]



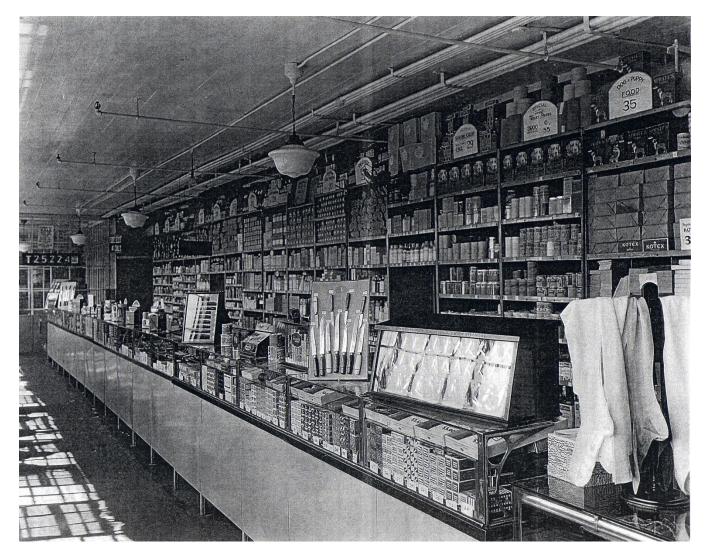
The Ford Commissary or Ford Store, Located at the Southeast Corner of Woodward Avenue and Carpenter Avenue, Kingsford, ca. 1926: Taken in about 1926, this interior view of the Ford Commissary on Carpenter Avenue shows a wide variety of canned goods, knives and other articles available. *[Ford Archives]*

[Compiled and Captioned by William John Cummings]



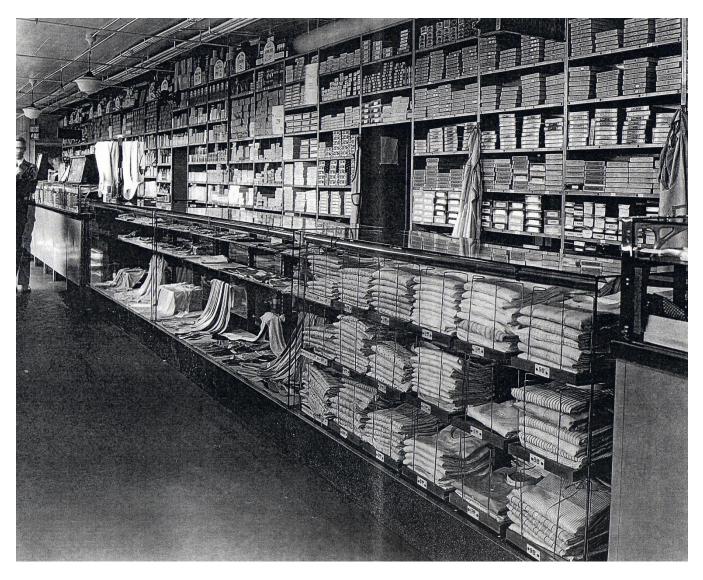
The Ford Commissary or Ford Store, Located at the Southeast Corner of Woodward Avenue and Carpenter Avenue, Kingsford, ca. 1926: Taken in about 1926, this interior view of the Ford Commissary on Carpenter Avenue shows the well-stocked shelves behind the counter area. [Ford Archives]

[Compiled and Captioned by William John Cummings]



The Ford Commissary or Ford Store, Located at the Southeast Corner of Woodward Avenue and Carpenter Avenue, Kingsford, ca. 1926: Taken in about 1926, this interior view of the Ford Commissary on Carpenter Avenue shows a wide variety of canned goods, knives and other articles available. *[Ford Archives]*

[Compiled and Captioned by William John Cummings]



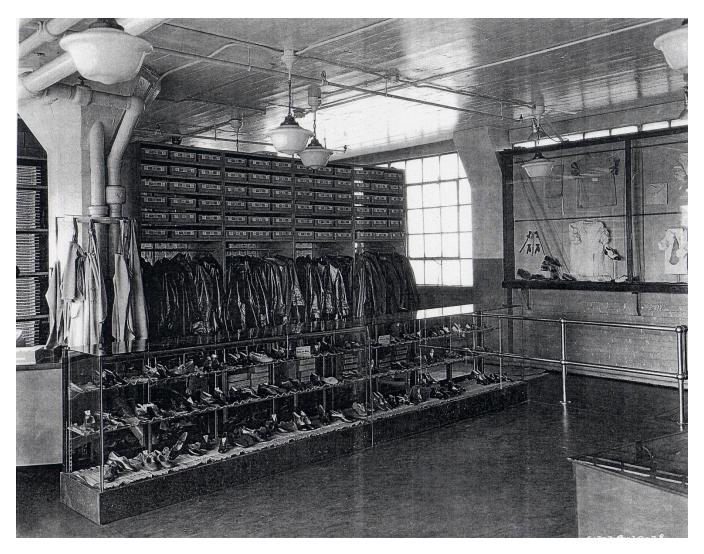
The Ford Commissary or Ford Store, Located at the Southeast Corner of Woodward Avenue and Carpenter Avenue, Kingsford, ca. 1926: Taken in about 1926, this interior view of the Ford Commissary on Carpenter Avenue shows a wide variety of yard goods farther down the same aisle. *[Ford Archives]*

[Compiled and Captioned by William John Cummings]



The Ford Commissary or Ford Store, Located at the Southeast Corner of Woodward Avenue and Carpenter Avenue, Kingsford, ca. 1926: Taken in about 1926, this interior view of the Ford Commissary on Carpenter Avenue shows pants in the cases and neckties. *[Ford Archives]*

[Compiled and Captioned by William John Cummings]



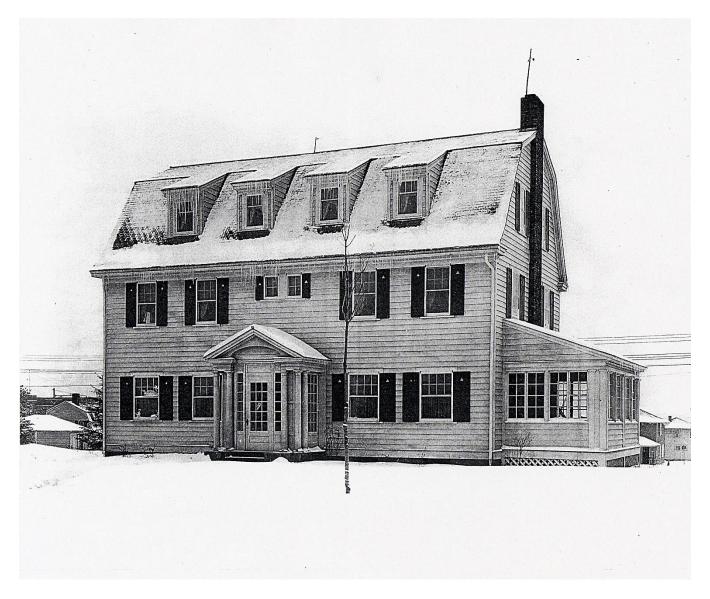
The Ford Commissary or Ford Store, Located at the Southeast Corner of Woodward Avenue and Carpenter Avenue, Kingsford, ca. 1926: Taken in about 1926, this interior view of the Ford Commissary on Carpenter Avenue shows men's and women's shoes displayed in several cases with lots of stock. *[Ford Archives]*

FORD CLUB HOUSE, WOODWARD AVENUE



Joseph Mongrain Farmhouse and Ford Club House, 700 Block of Woodward Avenue, Kingsford, ca. 1925-1930: Located on the 700 block of Woodward Avenue, the Ford Clubhouse, the three-story white frame building, was completed in late May, 1925, for use as headquarters for visiting officials. The house on the corner of Woodward Avenue and Ripley Avenue was the Joseph Mongrain farmhouse. Woodward Avenue had not been paved when this photograph was taken. The water tower in the distance was located west of the filtration plant and held the village's potable water supply. *[City of Kingsford]*

[Compiled and Captioned by William John Cummings]

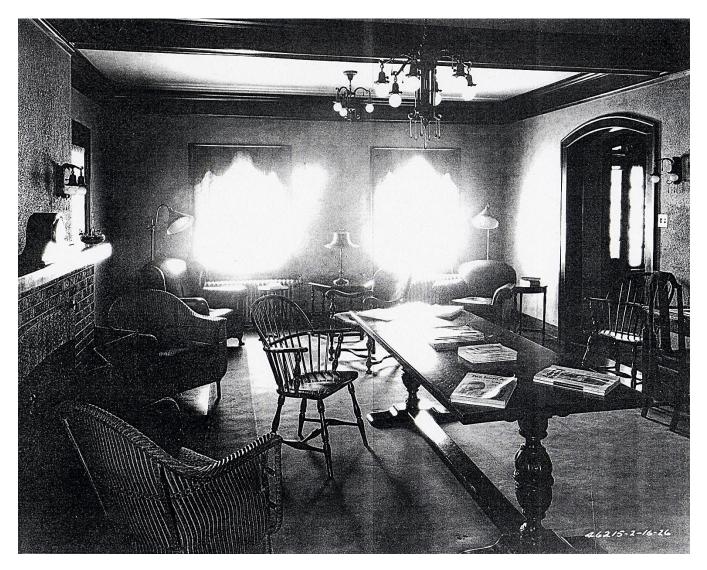


Ford Club House, 700 Block of Woodward Avenue, Kingsford, ca. 1925-1930: By May 21,1925, interior decoration and furnishing a few rooms on the second floor was all that remained to complete the Ford Club House on the east end of the 800 Block of Woodward Avenue. Note the enclosed entrance and the sun porch to the west off of the "lounging room." The club house was sold in 1942.

Researching at the Ford Archives, Guy Fostrom, an aficionado of the Ford Motor Company and early Ford automobiles, located the following photographs from 1926, as well as the original guest register of the "Iron Mountain Club House," with entries from June 25, 1925, to February 6, 1933. People from around the world – Brazil, Russia, Yugoslavia, Germany, England, Austria, Sweden, South Africa and Cuba – came to see the Iron Mountain plant, and were guests at the Ford Club House. Since Iron Mountain served as headquarters of the Northern Michigan Operations (NMO), the register also showed personnel from L'Anse, Pequaming, and Michigamee. Other multiple entries reveal that local residents were also invited here for various social functions.

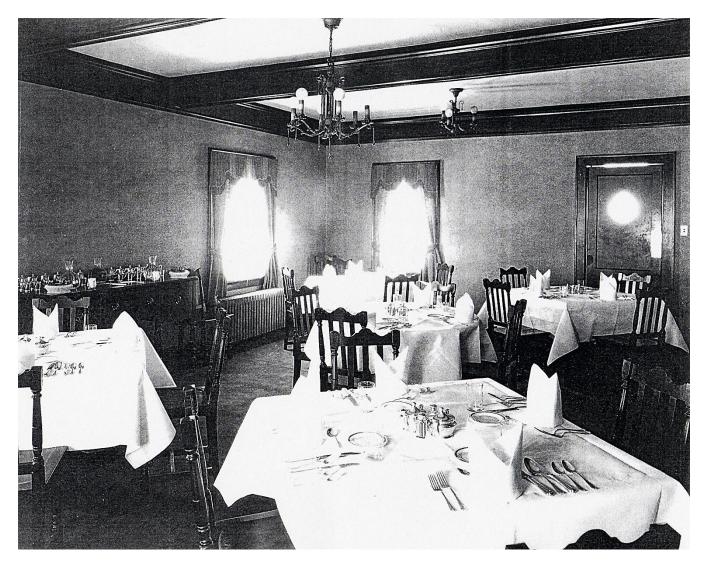
[Compiled and Captioned by William John Cummings]

On July 14, 1925, Erwin "Cannon Ball" Baker stayed here. Cannon Ball was the winner of the first race ever at Indianapolis Motor Speedway in 1909, riding an Indian motorcycle, and went on to set 143 cross country speed records. The famed Cannon Ball Run bears his name. On August 26, 1926, a party consisting of Henry Ford, Edsel Ford, P.E. Martin and Charles Sorenson, arriving aboard the *Fair Lane*, Ford's private rail coach, signed in. Just two months later, on October 28, 1926, George Herman "Babe" Ruth played an exhibition game here with the local Iron Mountain baseball team. The night before, he, too, signed in at the Club House. Henry Ford again signed in with several guests on August 21, 1931. *[The Henry Ford]*



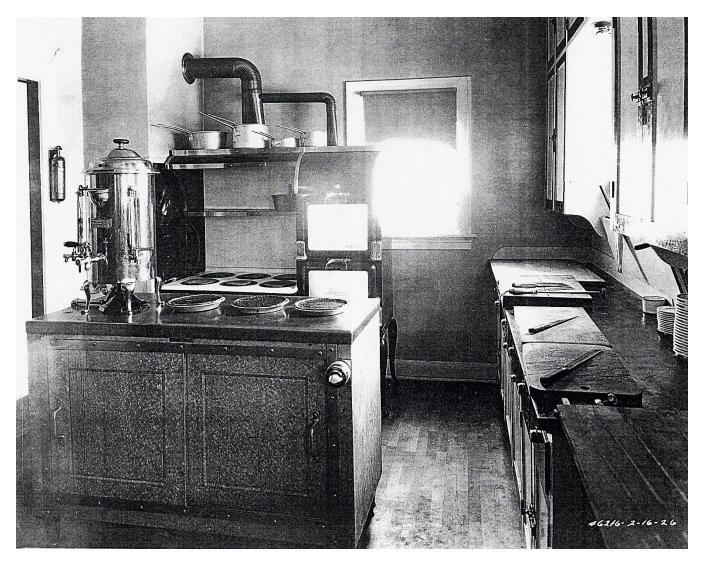
Ford Club House Living Room, 700 Block of Woodward Avenue, Kingsford, February 16, 1926: An article in the *Iron Mountain News* on May 21, 1925, noted "the lounging room is furnished with a number of highly upholstered easy chairs and settees." The vestibule or entry and the front door are visible through the archway. The lounging room or living room was located to the right of the vestible with large brick fireplace, seen at the left, as a focal point. Double French doors connected the lounging room to a porch to the west. This photograph was taken February 16, 1926. *[The Henry Ford]*

[Compiled and Captioned by William John Cummings]



Ford Club House Dining Room, 700 Block of Woodward Avenue, Kingsford, February 16, 1926: The dining room, measuring 28 feet by 18 feet, was located to the left of the vestibule. Note how elegantly the tables were set, and how complete the silverware was at each setting. An article in the *Iron Mountain News* on May 21, 1925, noted "Equipment for the dining room is expected to arrive here soon." This photograph was taken February 16, 1926. [*The Henry Ford*]

[Compiled and Captioned by William John Cummings]



Ford Club House Kitchen, 700 Block of Woodward Avenue, Kingsford, February 16, 1926: Access to the kitchen was through the dining room, and the rear entrance to the club house also accessed the kitchen. Adjacent to the kitchen there was a large washroom (bathroom), and from the washroom a hallway led back to the vestibule and the lounging room. An article in the *Iron Mountain News* on May 21, 1925, noted, "The clubhouse also has an up-to-date kitchen, the walls of which are brilliantly enameled in white." This photograph was taken February 16, 1926. *[The Henry Ford]*

[Compiled and Captioned by William John Cummings]



Ford Club House Bedroom, 700 Block of Woodward Avenue, Kingsford, February 16, 1926: A stairway in the vestibule provided access to the two upper floors. The second floor consisted of seven bedrooms and two washrooms (bathrooms). The third floor contained five bedrooms and two washrooms (bathrooms). An article in the *Iron Mountain News* on May 21, 1925, noted, "The second floor will have rooms for Ford officials who are visiting the plant here." This photograph was taken February 16, 1926. *[The Henry Ford]*

[Compiled and Captioned by William John Cummings]

FORD HOSPITAL, WOODWARD AVENUE



Ford Motor Company Hospital, 700 Block of Woodward Avenue, Kingsford, February 16, 1926: The Ford Motor Company Hospital, located on the 700 block of Woodward Avenue, just a few houses west of the Ford Club House, was a modified Ford Addition home. Dr. W.H. Alexander, who came to Kingsford from the Henry Ford Hospital in Dearborn, Michigan, in 1925, posed on the sidewalk in front of the hospital. Plans had been drawn up for a t0-bed hospital to be built on Crystal Lake at an estimated cost of \$350,000, but were dropped when the cost was deemed too much. [The Henry Ford]

FORD AIRPORT

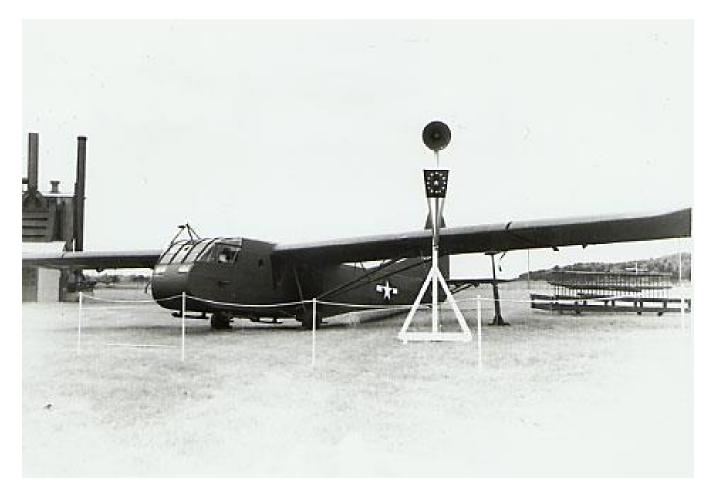


Ford Airport, West End of Woodward Avenue, Kingsford, ca. 1940-1945: [William John Cummings]



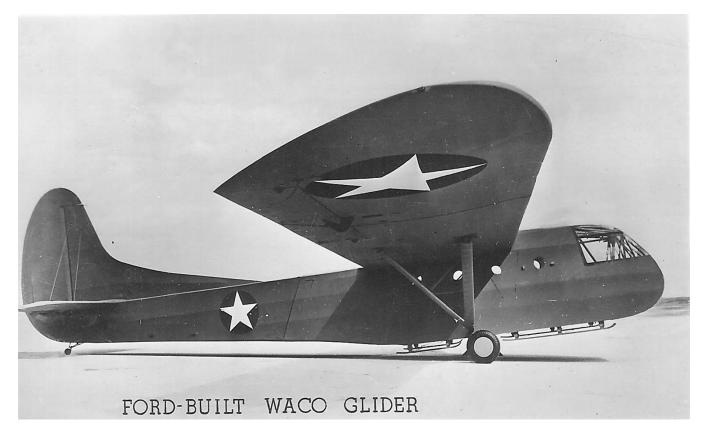


FORD MOTOR COMPANY GLIDER PRODUCTION



Ford CG4A Glider, Ford Motor Company Plant, Kingsford, ca. 1945: During World War II, the Ford Plant was converted to glider production. Ford produced 4,190 CG4A (C – cargo; G – glider) gliders between December, 1942 and August, 1945. Mark Swanson, foreman of the afternoon shift at the Kingsford plant, recalled that at first two or three gliders were produced daily, but when they went into 24-hour production, eight gliders could be manufactured. About 4,500 employees worked three shifts around the clock. During the afternoon shift the gliders were finished, inspected, torn down and the fuselages for the next day were set into place. The gliders were crated and shipped via railroad, each glider occupying five crates loaded on three flatcars. Toward the end of production, the gliders were towed to the Ford Airport on a trail between the Menominee River and Woodward Avenue, and about the last 100 gliders were then towed by airplane to Milwaukee. *[Jack Deo, Superior View Studio]*

[Compiled and Captioned by William John Cummings]



CG-4A WACO Glider, Ford Motor Company, Kingsford, ca. 1942-1945: This postcard view shows a Ford-built CG-4A WACO glider. *[Guy Forstrom]*

FORD, EDISON AND FIRESTONE AT KINGSFORD IN AUGUST, 1923



Edison, Ford and Kingsford, Cowboy Lake, Kingsford, Mid-August, 1923: On the afternoon of August 18, 1923, Henry Ford arrived in Iron Mountain with a number of guests, setting up a camp on the Ford Motor Company's private grounds at the Cowboy Lake grove. The group sailed to Escanaba from Traverse City and traveled here in three Lincoln cars, two Lincoln supply trucks and a White pantry car. The camping party included Mr. and Mrs. Henry Ford, Mr. and Mrs. Thomas A. Edison, Mr. and Mrs. Harvey Firestone, Russell Firestone, Miss Bogue, a friend of Mrs. Thomas Alva (Mina) Edison, and Edward G. Kingsford. This informal photograph, probably taken at the campsite, shows Edison, Ford and Kingsford, the latter two in cowboy attire. [Menominee Range Historical Museum]

[Compiled and Captioned by William John Cummings]



Edison, Ford and Kingsford, Cowboy Lake, Kingsford, Mid-August, 1923: Thomas Alva Edison, Henry Ford and Edward G. Kingsford informally posed at the camp site in the grove at Cowboy Lake in mid-August, 1923. *[Guy Forstrom]*

[Compiled and Captioned by William John Cummings]



Harvey Firestone, Henry Ford, Thomas Alva Edison and Edward G. Kingsford, Cowboy Lake, Kingsford, mid-August, 1923: Campers informally posed at the campsite at Cowboy Lake in mid-August, 1923. [Guy Forstrom]

[Compiled and Captioned by William John Cummings]



Ford, Edison and Firestone Camping Trip, Cowboy Lake, Kingsford, Mid-August, 1923: The Ford camping party had one truck filled with tents and cots. Here they dined under a tent at their special round camping table set up on the Ford Company's private grounds at Cowboy Lake. A Japanese cook and his helper were included in the camping party's staff. The table's revolving center section facilitated passing the food. This photo depicts the Sunday noon dinner on August __, 1923, at the Cowboy Lake grove with local guests. Pictured, from left to right, were Clara Ford, Edward G. Kingsford, Idabelle Firestone (wearing black hat), Miss Boque, Mrs. Thomas Alva (Mina) Edison (behind flower arrangement), Thomas Alva Edison, unidentified man (behind flower arrangement, but film reveals this to be Otto C. Davidson, Superintendent of the Chapin Mine in Iron Mountain), Henry Ford, empty chair (but film reveals that Harvey Firestone was sitting there), Dr. Joseph Addison Crowell, unidentified woman (but probably Mrs. Joseph Addison (Lenora) Crowell, as she can be seen sitting next to Dr. Crowell in other photos), woman believed to be Mrs. Edward G. (Minnie Flaherty) Kingsford (big flower on hat), three unidentified people with backs toward photo, with two on the right being R.V. Dudley and his wife based on their apparel and other photos and film of them together. There are several minutes of film of this dinner. [City of Kingsford]