

WM. T. KNAUSS & SON,  
DEALERS IN  
AUTOMOBILES,  
Bethlehem, Pa.

ALCO  
1912



AMERICAN LOCOMOTIVE COMPANY



# Features of Individuality

## White Band

Around the body of every Alco is a white band. It is a symbol of superiority—a badge of distinction. It distinguishes the Alco from other motor cars. It denotes an elegance uncommon among motor cars. The white band is motor-car insignia for beauty, culture, good taste, speed and power. It stands for long life. Within its "charmed circle" there is a degree of comfort rare among motor cars.

## Wide Doors

It has taken the body designers of the Alco two years to produce the doors which grace the open cars. The door of a motor car is difficult to design—difficult because it must be measured in fractions of an inch, and difficult because a door easily can mar the otherwise happy appearance of any car. The doors on the open Alco cars are, first of all, practical. They are wide. The rear and front doors alike permit easy entrance and exit. Second, they are beautiful, perfectly retaining the low, long lines which distinguish the Alco.

## Illuminated Step

Every Alco has an electric light concealed underneath the door on the curb side of the body. This light illuminates automatically as the door opens and floods the step and curbing with rays of light. It makes entrance and exit at night very easy, and shares with many similar luxuries in anticipating every little desire of the car's passengers.

## Searchlight on Windshield

For night driving over country roads every Alco, whether open car or closed car, has a small searchlight attached to the windshield. The diameter of its face is seven inches. It is mounted on a universal joint which permits pointing the lamp in any direction, up, down or sidewise. It throws a light far in advance of the car and makes easy the road ahead for the chauffeur.

## Depth of Upholstery

Deep upholstery is found in all Alco cars—deeper even than in the 1912 models. The seat cushions in the open car measure twelve inches and in the closed car the depth is eleven inches. So deep is the upholstery that the seat cushions rest upon a seat platform only six inches from the bottom of the tonneau. Seat backs and arm rests are generous in the usual quality of horse hair and superior leather which characterizes the Alco cars of every season.

## Slip Covers

Slip covers are provided throughout the car as usual, but in addition an extra slip goes over the front part of the tonneau in the open cars. This makes a more complete slip cover arrangement, and avoids scratching up the portion of the car it covers. In this slip are pockets for ladies' bags and smaller packages, as well as a case for cards.

## Roominess in Rear Seat

Three persons of more than normal size, with heavy wraps on, may sit comfortably in the rear seat of the open cars. The seat is 50 inches wide, three inches broader than in the Alcos of last year. This luxury of comfort has long been sought by motor car builders, and seldom has it been developed other than at the expense of improper balance, tire wear and beauty.

## Simple Windshield

Peculiar to all Alco cars is the windshield, which is finished in ebony with glass of excellent plate and mounted in a strong oak frame. It fastens on the cowl of the dash; no guy rods are needed to support it. A large, round handscrew of brass turned once or twice fastens the glass at any degree of tilt desired. The glass shield is movable both forward and back of the cowl so that rain can be shed without disturbing the current of air into the fore cabin of the car.

## Concealed Tool Box

The tool box in the 1913 Alco is concealed from view. It is underneath the running board, near the forward end, and directly beneath the apron. Entrance is via the apron, which is opened by means of turning a small knob. The box holds the usual equipment of tools, and is no less accessible than when the tool box was beneath the running board. By concealing it from view, a degree of beauty is added to the keen long lines of the Alco.

## Gasolene Gauge

On the gasolene tank, hung at the rear of the car, is a "telltale" gauge, which denotes the quantity of gasolene in the tank. The gauge indicates whether the tank is full, three-quarters full, one-half full, or nearly empty. The dial is of durable material and the mechanism is of such good hardware that its length of life will be great. It saves time and annoyance over methods formerly used for determining the amount of gasolene remaining in the tank.





Five passenger, six cylinder Alco Toy Tonneau.

## SPECIFICATIONS OF SIX CYLINDER SIXTY HORSE POWER ALCO

**Engine:** Six cylinder, vertical, cast in pairs.

Bore: 4 $\frac{1}{2}$  inches.

Stroke: 5 $\frac{3}{4}$  inches.

Valve Location: On opposite sides of cylinders.

Valve Diameter: 2  $\frac{1}{8}$  inches (interchangeable).

**Horse Power:** A. L. A. M. Rating, 54.8. H. P.

Piston Area: 22,562 $\frac{1}{2}$  square inches.

Piston Displacement: 579.88 cubic inches.

**Transmission:** Sliding gears, selective type. Four speeds forward and one reverse.

Direct Drive: On fourth or high speed.

**Gear Reductions:**

1st: 8.93 to 1                      3rd: 3.62 to 1

2nd: 5.12 to 1                      4th: 2.59 to 1

Reverse: 8.93 to 1.

**Ignition:** Bosch dual system through one set of spark plugs.

Magneto: Bosch.

**Cooling System:** Water and fan.

Circulation: Centrifugal pump.

Pump Drive: Gear.

Fan Drive: Belt.

Fan Blades: Six.

Radiator: Honeycomb type.

Radiator Suspension: Three point.

**Clutch:** Multiple disc.

Clutch Surface Materials: Bronze and steel.

**Lubrication:** Force feed and splash.

**Brakes:** 2 sets acting on drums bolted to rear wheels.

Service Brakes: Contracting type, operated by foot pedal.

Emergency Brakes: Expanding type, operated by hand lever on side of car.

Dimensions: Diameter of drum 15 inches. Width of drum 3 inches.

All brakes are lined with "Non-Burn."

**Axles:** Front: One piece drop forging.

Rear: Full floating type. One piece drop forging.

**Drive:** Shaft.

**Frame:**  $\frac{3}{8}$ -inch channel steel, 5 inches wide.

**Gasoline Tank Capacity:** 26 gallons.

**Oil Reservoir Capacity:** 8 quarts.

**Springs:** Semi-elliptic.

Front: 35 $\frac{1}{2}$  x 2 inches.

Rear: 55 x 2 $\frac{1}{2}$  inches.

**Tread:** 55 inches.

**Tires:** Front: 36 x 4 inches.

Rear: 36 x 5 inches.

**Weight of Chassis:** 3450 lbs.

**Weight of Car:** Touring Car with complete equipment, including gasoline, water, oil, two extra tires, etc: 4125 lbs.

**Wheel-base:** 114 inches.

**Bearings:** Hess-Bright (D. W. F.) bearings are used throughout the clutch, transmission, counter-shaft, propeller-shaft, rear axle mechanism and in all wheels. Plain bearings are used in the motor.

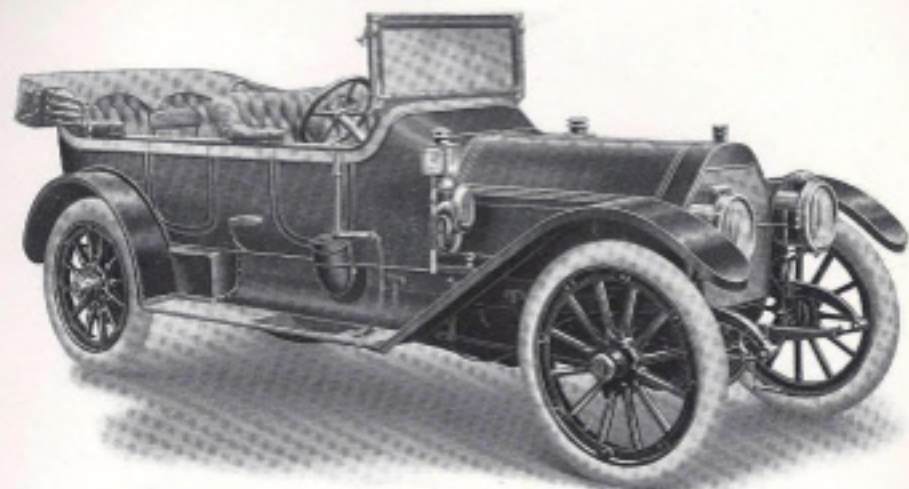
**Price:** Touring Car, Toy Tonneau and Runabout, \$6,000. Limousine or Landauet, \$6,750.

**Equipment:**

Open and Closed Bodies: Tire brackets, acetylene headlights, slip covers, wind shield, Sears-Cross combination speedometer and clock, Klaxon horn, combination electric, oil, dash and tail lamps.

Touring Bodies: In addition to the foregoing, cape cart top, coat rail, extra folding seats and a foot rest.

Closed Bodies: are also furnished with electric dome light, speaking tube, extra seats, and toilet cases. A sheet metal box that fits on to the running board, is filled with tools and spare parts.



Seven passenger, six cylinder Alco Touring Car.

## T H E 1 9 1 2 A L C O

**T**HE 1912 Alco is a better car.

It is better because it has been refined to a practical perfection.

It is better because it is more beautiful.

And better because it is more comfortable.

The lines of the 1912 Alco were conceived by an artist.

They are not merely mechanical.

It took the artist many weeks to get the grace, the symmetry, the harmony, the style, the fashion and the final touch whereby the Alco leads into a new era of the automobile.

To make it a more comfortable car the builders have constructed the seat lengths, heights, depths and thicknesses, in new proportions. They have introduced new and clever little devices to anticipate and prevent every possible manner of motor fatigue.

The seat backs conform with and support the figure with luxurious ease and comfort and are abundantly thick with padding of the best material and form known to the upholsterers' art.

The seat cushions are deeply tilted to offer relaxation and to hold one firmly in the seat at all times. Then the seats are also comfortably close to the floor.

But beneath this luxury, comfort and beauty, is security in a chassis that minutely approaches the limit of engineering perfection.

The Alco engineers have sought at all times to build a safe car. You will find they have estimated every possible strain, every possible

mishap and have built to prevent. The steering apparatus, the brakes and particularly the rear axle are just as strong, substantial and accurate as the human mind and the human hand can make.

As you glance over the chassis you will note the large factor of safety. You will admire the thought, the skill and the workmanship which have developed this element of safety.

Harry Grant, who has driven the Alco a two times winner of the Vanderbilt Cup, has never had a serious mishap. He lays his safety to this factor.

A car can not be a good car unless it is safe. But having built it safe and good, the builders of the Alco have made it comfortable and beautiful.

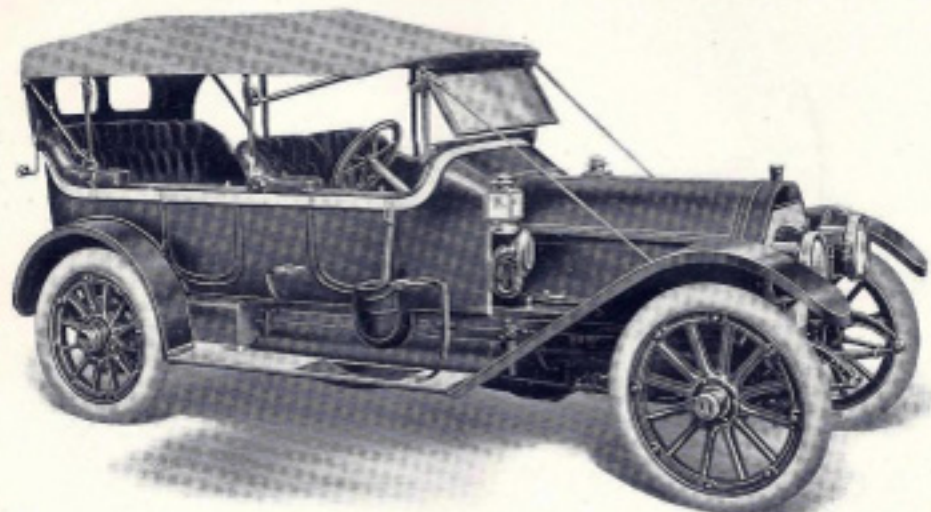
You should remember also that the Alco dates back a good many years in age. It had its beginning in the Berliet, the well known French car. We purchased the rights to build the Berliet in America, and our engineers have made constant improvements upon the original design.

When the Alco won the race for the Vanderbilt Cup in 1909, we were satisfied in our own minds with the honesty and the ability of the car.

When it won again in 1910—the very same car—the whole automobile world admitted the honesty and ability of the Alco.

So the 1912 Alco leaves little to be desired. It affords a satisfaction beyond money value, and safety and security beyond price.





*Five passenger, six cylinder Alco Toy Tenor with Gibby Top.*

## T O D E A L E R S

**T**HE American Locomotive Company desires to extend its selling organization into territories in which it is not now represented.

It is interested only in those dealers who have shown an aggressive spirit and who have conducted their affairs upon a good business plane.

To these—and to these only—it offers interesting and attractive inducements.

Its 1912 product has a wealth of selling values—quickly evident to the eye of the good salesman.

It will liberally advertise its 1912 product with a generous publicity appropriation, equal to that of any high priced automobile.

It will push its 1912 product with a renewed vigor and will aid its dealers directly and indirectly in the retail sale of its product.

As evidence of its good faith, it may be interesting to note:

That the American Locomotive Company is a \$50,000,000 organization.

That it has been moving the world's goods since 1835.

That it is the largest organization engaged in the manufacture of automobiles.

That it has been building motor cars since 1905.

That it has built only the best cars money could produce.

That in every community owners of the Alco are among the leading men.

That the Alco is the only car that has won the Vanderbilt Cup twice in succession and the only stock car that ever won it.

That the factory in which the Alco is built is the best equipped motor car factory in America.

To line up with the American Locomotive Company is to make yourself a permanent fixture in the automobile business, for the permanence of the American Locomotive Company is obviously certain.

To sell the Alco is to sell a good car that easily stays sold.

It is a car of proven worth, of international reputation—not a new car—not an unknown car.

You seldom see or hear of an Alco in a second hand shop.

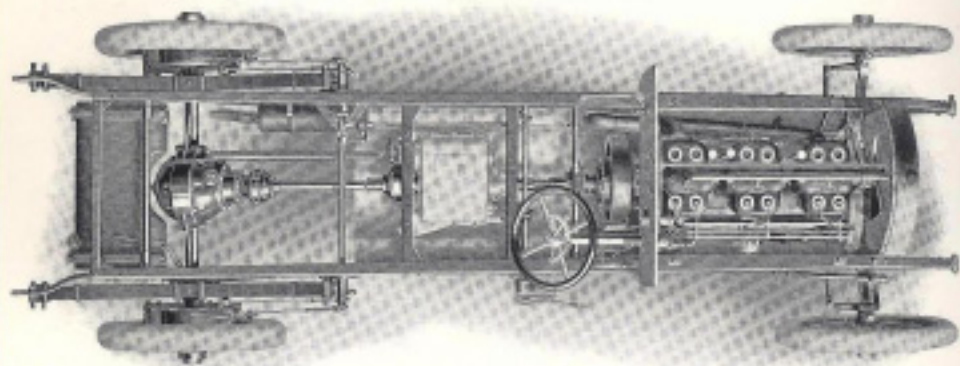
Think that over.

There is a fair and reasonable profit in handling the Alco. As for the market there is no doubt of that. We have done a consistently increasing business. In the first three months of 1911 we did a larger volume of business than during the entire year of 1910.

Here is a golden opportunity for the right man.

If interested, write or wire us. Or better, get on a train and have a personal interview.

A M E R I C A N L O C O M O T I V E C O M P A N Y  
Broadway at Sixty-Second Street, New York City



*Six cylinder Alco Chassis.*

## C H A S S I S

**S**TRONG, simple, clean and perfectly balanced—this, in short, describes the six-cylinder Alco chassis. To the experienced motorist the interrelation of parts in this chassis is a triumph of harmony. It is an expression of mechanical perfection.

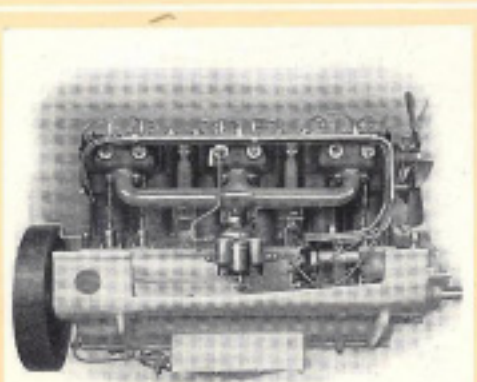
Years of experimenting and strong engineering thought have reduced the number of unnecessary parts to a minimum.

There is plenty of strength, but no unnecessary weight; unusual simplicity, but a large factor of safety; a quickly apparent cleanness, but no engineering short-coming; an impressive

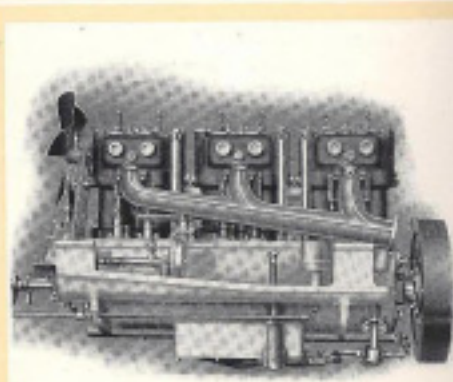
perfect balance, but all parts in natural and normal proportions.

This applies equally to the four-cylinder Alco chassis. The latter has a shorter length of frame, due to a smaller motor, but with this general exception the six-cylinder and four-cylinder chassis are identical.

There is a particular pride in the workmanship on the Alco chassis. The skilled New England workmen in the shops are the best the industry affords. Men who own the Alco often comment on how well the car is put together.

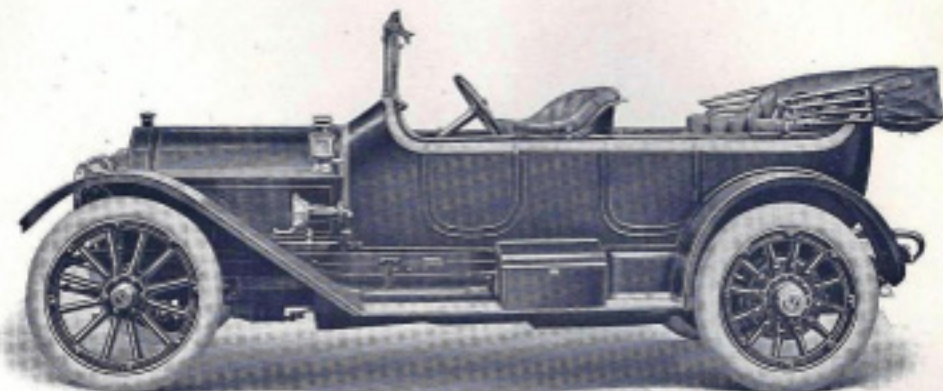


*Intake side, six cylinder Alco Motor.*



*Exhaust side, six cylinder Alco Motor.*





Five passenger, four cylinder Alca Toy Tonneau.

## SPECIFICATIONS OF FOUR CYLINDER FORTY HORSE POWER ALCO

**Engine:** Four cylinder, vertical, cast in pairs.

Bore:  $5\frac{3}{4}$  inches.

Stroke:  $5\frac{1}{2}$  inches.

Valve Location: On opposite sides of cylinders.

Valve Diameter:  $2\frac{1}{2}$  inches (interchangeable).

**Horse Power:** A. L. A. M. Rating, 42 H. P.

Piston Area: 20.60 square inches.

Piston Displacement: 453.8 cubic inches.

**Transmission:** Sliding gears, selective type. Four speeds forward and one reverse.

Direct drive: On fourth or high speed.

**Gear Reductions:**

1st: 10.35 to 1

3rd: 4.19 to 1

2nd: 6.26 to 1

4th: 3.00 to 1

Reverse: 10.35 to 1.

**Ignition:** Bosch dual system through one set of spark plugs.

Magneto: Bosch.

**Cooling System:** Water and fan.

Circulation: Centrifugal pump.

Pump drive: Gear.

Fan Drive: Belt.

Fan Blades: Six.

Radiator: Honeycomb type.

Radiator Suspension: Three point.

**Clutch:** Multiple disc.

Clutch Surface Materials: Bronze and steel.

**Lubrication:** Force feed and splash.

**Brakes:** 2 sets acting on drums bolted to rear wheels.

Service Brakes: Contracting type, operated by foot pedal.

Emergency Brakes: Expanding type, operated by hand lever on side of car.

**Dimensions:** Diameter of drum 15 inches. Width of drum 3 inches.

All brakes are lined with "Non-Burn."

**Axles:** Front: One piece drop forging.

Rear: Full floating type. One piece drop forging.

**Drive:** Shaft.

**Frams:**  $\frac{7}{8}$ -inch channel steel, 5 inches wide.

**Gasoline Tank Capacity:** 26 gallons.

**Oil Reservoir Capacity:** 8 quarts.

**Springs:** Semi-elliptic.

Front:  $55\frac{1}{2}$  x 2 inches.

Rear: 55 x  $2\frac{3}{4}$  inches.

**Tread:** 55 inches.

**Tires:** Front: 36 x 4 inches.

Rear: 36 x 5 inches.

**Weight of Chassis:** 3075 lbs.

**Weight of Car:** Touring Car with complete equipment,

including gasoline, water, oil, two extra tires, etc.

5985 pounds.

**Wheel-base:** 126 inches.

**Bearings:** Hess-Bright (D. W. F.) bearings are used

throughout the clutch, transmission, counter-shaft,

propeller-shaft, rear axle mechanism and in all wheels.

Plain bearings are used in the motor.

**Price:** Touring Car, Toy Tonneau and Runabout, \$4,500.

Limousine and Landaulet, \$5,500.

**Equipment:** Open and Closed Bodies: Tire brackets,

acetylene headlights, tail lamp, combination electric,

oil, dash and tail lamps, and a box with flexible

tubing.

**Touring Bodies:** In addition to the foregoing, cape

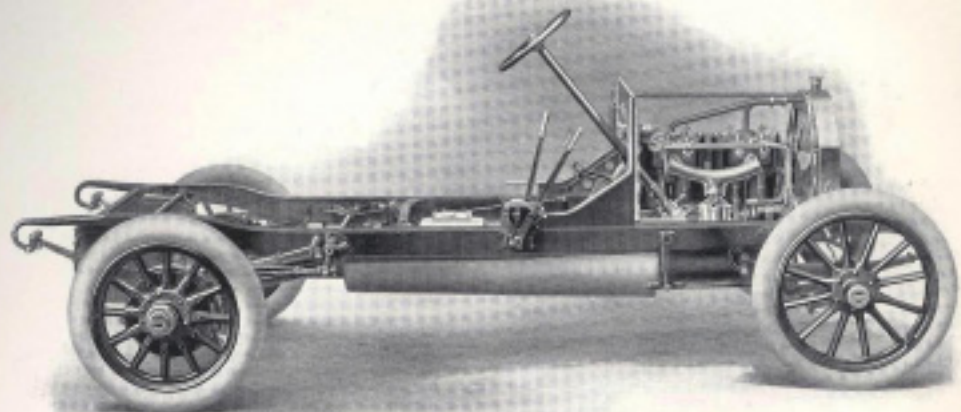
cast top, coat rail, and extra folding seats.

**Closed Bodies:** are also furnished with electric dome

light, speaking tube, extra seats, and toilet cases.

A sheet metal box that fits onto the running board,

is filled with tools and spare parts.



*Four cylinder Alco Chassis.*

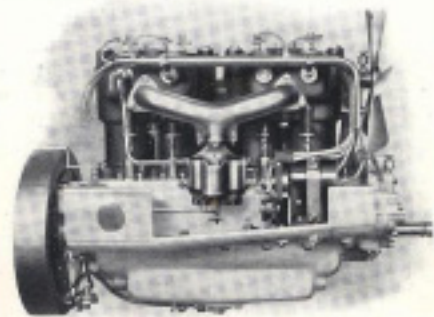
## M O T O R S

**S**IXTY horse-power is developed by the six-cylinder motor. Bore,  $4\frac{3}{4}$  inches. Stroke,  $5\frac{1}{2}$  inches. It is a consistent, economical, powerful motor now in its fourth year of service without any notable change of design. 1912 adds what seems to be the final touch to an already healthy and substantial engine.

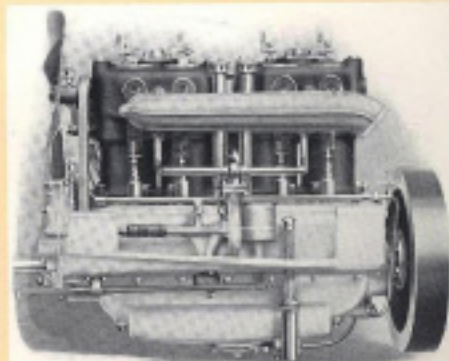
Oiling of this motor is absolutely positive. The oil is fed under a 4 pound pressure through the crank-shaft to all bearings and the timing gears. It is then strained before it returns to the reservoir to repeat the same operation.

The oil pump is a part of the motor and hence the flow of oil increases and decreases with the speed of the motor.

Forty horse-power is developed by the four-cylinder motor. Bore,  $5\frac{1}{4}$  inches. Stroke,  $5\frac{1}{2}$  inches. The harmonious interrelation of parts, proper proportions, fewness of parts, positive and thorough lubrication, efficient carburetion and generous areas of the manifold inlet pipes and compression chambers with efficient cooling, all tend to make this motor particularly economical.



*Intake side, four cylinder Alco Motor.*

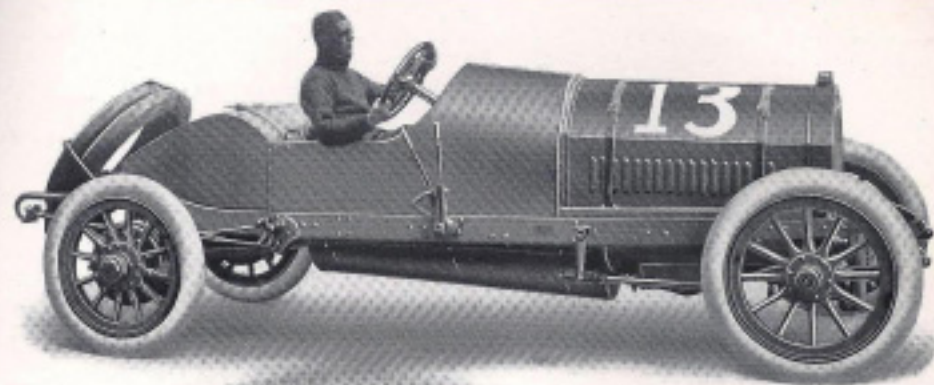


*Exhaust side, four cylinder Alco Motor.*



## 20 POINTS *of* PERFECTION IN THE 1912 ALCO

1. Low, pleasing lines of the body; large, symmetrical doors.
2. Provisions for increased comfort; softer, deeper seat and back cushions; more room.
3. Silencing of noise in motor, transmission, and rear axle.
4. Oil, dust and water-proofing of transmission case; dust proofing of sod pan.
5. Extension of radiator below center line of crank-shaft; neater appearance and protection to crank case.
6. Clutch refined in detail—offers even more efficiency in crowded traffic.
7. Brakes refined in adjusting and equalizing.
8. Manifolds increased in area.
9. Exhaust enlarged in area and dropped down so that the gas leaving one cylinder has a tendency to form a vacuum in the pipe, drawing the next exhaust from the following cylinder.
10. Large fibre and felt washers provided in fore and aft bearings of the transmission to prevent leakage of oil; also on driving shafts of rear axles.
11. One piece valve plunger with a large roller applied to insure quietness and smooth running.
12. Adoption of automatic carbureter, giving proper proportion of air and gas at all speeds, preventing spasmodical running of motor; more economical.
13. Gear shift bracket housed in to keep out dirt and dust.
14. Adoption of gasoline strainer which stops all particles from entering carbureter.
15. Pressure device improved so that pressure on gasoline in tank is practically the same at all engine speeds.
16. Both gear shift and brake levers lengthened four inches to provide better accessibility.
17. Even more rigid specifications and testing of materials than before; more than sixty expert testers.
18. Increased rigidity in finished tests of cars.
19. Further refinement of heat treating processes of materials.
20. Refinement of lamp equipment and attachments; more substantial lamps; new designs.



*Harry Hartman in one of the new Alco Racing Cars.*

## 1912 RACING TEAM

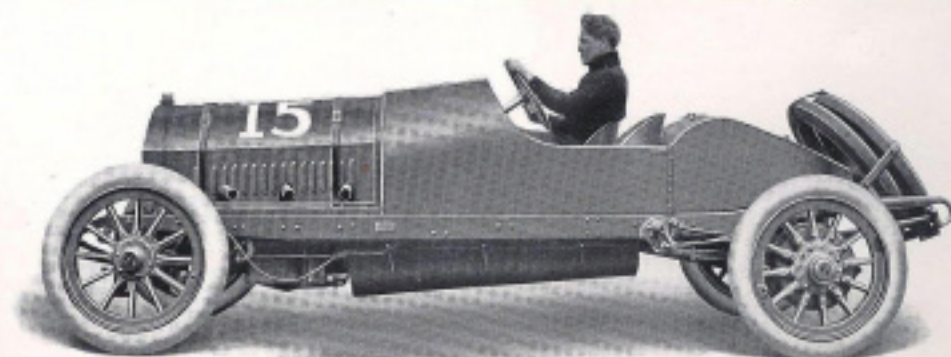
**T**O demonstrate even more widely to the American public the speed, endurance and durability of the Alco, the American Locomotive Company shortly will place a three car racing team in the field.

Harry F. Grant will continue to drive the car in which he won the Vanderbilt Cup twice. Frank H. Lee, Grant's mechanician, will drive a second car, and Harry Hartman, the well known racing driver, will drive the third.

The new cars are being tried out daily to determine their speed and to test every part.

No definite date has been set for the first public appearance of the team, but it is likely they will be entered in the Elgin race, in August.

The Alco team will enter road races, track races and hill climbs in all sections of the country.



*The "Sister" Alco to be driven by Frank H. Lee, Grant's former mechanician.*





Harry Grant in "Old No. 18"—on the last lap.

## TWICE WINNER OF THE VANDERBILT CUP

**T**O win the Vanderbilt requires the best of material, construction and design in a motor car. It takes speed and stability. It requires a good soul in a car.

To win the Vanderbilt Cup has been the high ambition of many motor car manufacturers.

But to win it twice—and twice in succession!

This is what the Alco has done. It won the 1909 Vanderbilt and the 1910 Vanderbilt. Both years the course was the same—12.64 miles to a lap, with twenty-two laps to the race—278.08 miles.

In 1909 the race was for stock cars only. Fifteen started. Eleven dropped out before the end. The Alco with Harry F. Grant driving and Frank H. Lee, as mechanic, won the race by more than five minutes. The time was four hours, twenty-five minutes, forty-two seconds—an average of 62.8 miles per hour.

In 1910 the race was open to any sort of car with a cylinder displacement not exceeding 600 cubic inches. Twenty-nine cars started. Most of them were built especially for the race. Some of them were built in Europe.

Grant in the Alco—the very same car he drove the year before—won by 25 seconds, the time being 4 hours 58.64 seconds. The average was 65.18 miles an hour—faster than ever made in any long distance road race before.

No other stock car ever won the Vanderbilt. No other car has won it twice in succession.

No other car ever repeated like the Alco.

It's repetition that counts—a car that can repeat like this must be a good car.

## SOME PROMINENT OWNERS OF THE ALCO

W. W. ATTERBURY, Vice-President Pennsylvania Railroad.  
CHARLES L. AYLING, Ayling & Co., Bankers.  
H. C. BARROLL, President Barroll & Co., Brokers.  
W. C. BROWN, President New York Central Lines.  
H. K. BURRAS, H. K. Burras & Co., Bankers.  
JOHN CARSTENSEN, Vice-President N. Y. Central Lines.  
I. M. CATE, Capitalist, Baltimore.  
J. E. CHILDS, Vice-President N. Y., Ontario & Western R. R.  
ROBERT CLUETT, President Cluett, Peabody & Co.  
JOEL S. COFFIN, President Franklin Railway Supply Co.  
OTIS CUTLER, President American Brake Shoe & Foundry Co.  
C. F. DALY, Vice-President New York Central Lines.  
E. W. DAVIS, Standard Oil Co., Java.  
ARTHUR DORRANCE, President Joseph Campbell Co.  
F. F. FITZPATRICK, President Railway Steel-Spring Co.  
EX-JUDGE E. T. GLENNAN, Chicago.  
BARON S. GOTO, Cabinet Minister, Tokio, Japan.  
JOHN H. HANAN, Hanan & Co., Shoe Manufacturers.  
H. B. HARRIS, Promoter of Theatrical Enterprises.  
W. R. HEARST, Journalist, New York.  
R. D. HOPKINS, Brigham-Hopkins Co., Baltimore, Md.  
R. A. JACKSON, 1st Vice-President Northern Pacific Ry.  
JAMES JEROME, U. S. Steamship Co.  
WILLIAM MASON, Banker, Chicago.  
WM. G. McADOO, President Manhattan & Hudson R. R.  
F. W. McFARLANE, Planter, Honolulu, T. H.  
S. A. MEGEATH, Standard Oil Co.  
GEN. CHARLES MILLER, President Galena Oil Co.  
Z. NAKAMURA, President South Manchuria Ry. Co.  
HENRY OLLESHEIMER, President Metropolitan Bank, N. Y.  
G. W. RICHARDSON, Vice-President Erie Railroad.  
E. B. THOMAS, President Lehigh Valley R. R.  
MICHAEL M. VAN BEUREN, Van Beuren & Buchnam, Bankers  
W. K. VANDERBILT, JR., Ass't to Pres., N. Y. Central Lines.  
W. H. WILLYS, President Willys-Overland Company.