

# Baldwin

(Steam)

## Automobiles



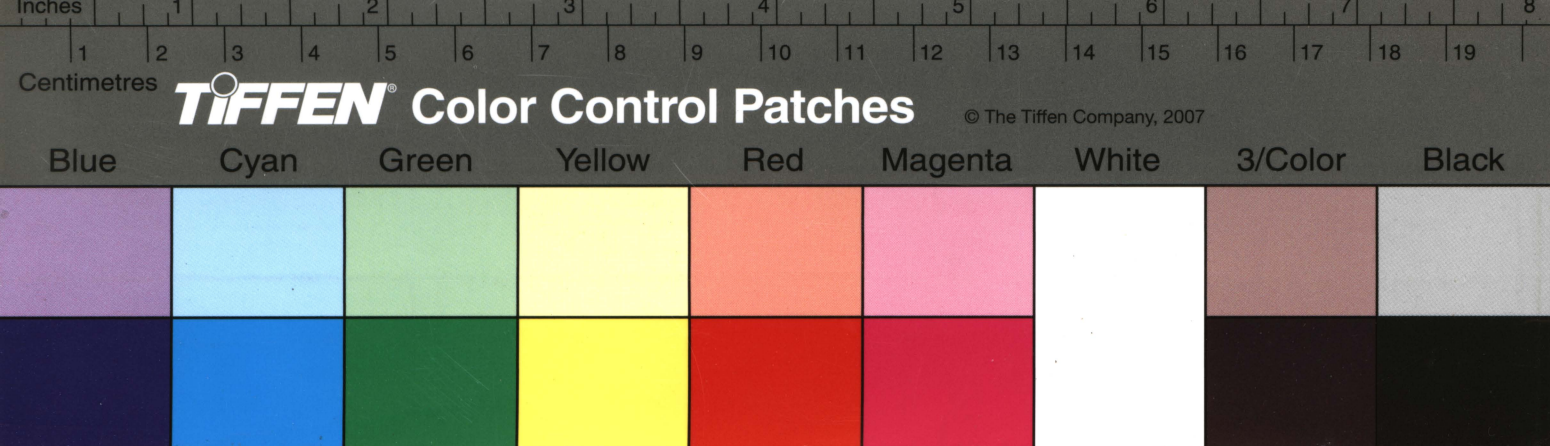
**I**N placing the Baldwin Automobiles before the public, we do it with a feeling of particular pride, believing, as demonstrated by exhaustive tests, that we have accomplished the production of an ideal for which all Automobile makers are and have been striving, and that the Baldwin Automobile possesses merits of far greater magnitude than those possessed by any other mechanically driven carriage, wagon or dray.



### EXPERIENCE

Mr. L. F. N. Baldwin, who originated, designed and perfected our Automobiles, and who is the inventor, has charge of





our mechanical department. He has had over seven years' experience in building and perfecting mechanically driven vehicles, and to him can be traced the origin of many of the horseless carriages now before the public. With his vast experience thus acquired in this particular line of mechanics, his thorough knowledge of details of competing vehicles, he has been able to avoid the undesirable features which may be found in other carriages, and to produce a practically perfect mechanically driven vehicle in the Baldwin Automobile.

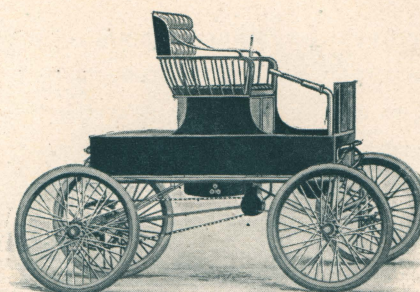
### POWER

Our motor is driven by steam, and combines the greatest simplicity with reliability and durability. Steam is now conceded to be the proper method of power, the only objections heretofore advanced to steam driven vehicles are overcome by improvements found only in the Baldwin machines, and which are thoroughly covered by patents owned exclusively by this Company.

### BOILER

The steam is generated by burning vaporized gasoline or kerosene under an

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**BALDWIN PIANO BOX RUNABOUT**

See Prices and Terms Pages 17 and 19.



upright tubular boiler, which is made with an immense heating surface to permit rapid generation of the steam. Each boiler is subjected to a cold water test of 1000 lbs., and as the operating pressure averages 150 to 160 lbs., an enormous factor of safety is provided.

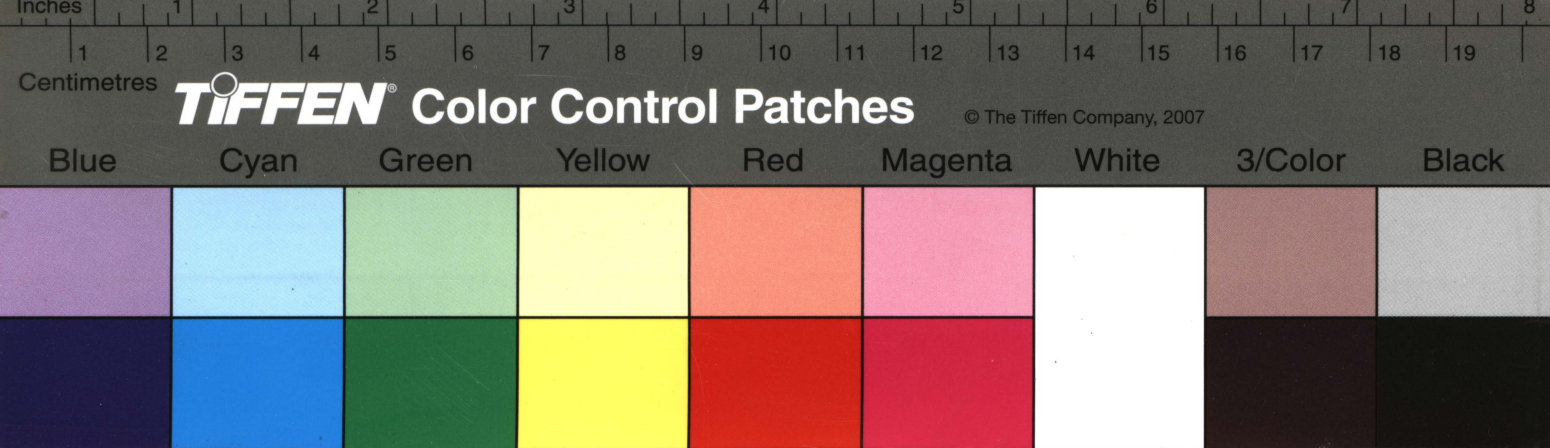
### ENGINE

The carriage is driven by a powerful and compact upright engine of peculiar design, which is of our own make, and covered by patents owned exclusively by this Company.

The power for small pleasure vehicles ranges from four to eight H. P. For

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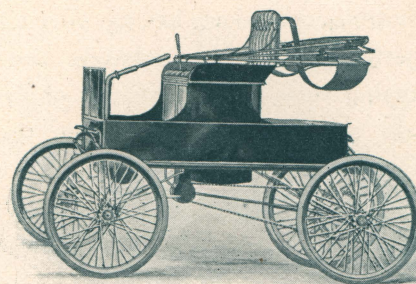
larger vehicles, we make motors of power in accordance with load to be carried.

The engine or motor is connected to the rear driving sprocket by a powerful chain of special design. The engine is reversible, but as the ordinary link motion on a high speed engine wears very rapidly, and soon becomes troublesome because of this wear, we accomplish the reversing by a much better method, and enable a much more simple and vastly more durable engine.

This engine is the only one produced which has a plain rotary motion for driving the valves, and has an adjustable cut-off, thereby procuring an equal economy with that obtained by the link motion, and omitting some twenty-one different bearings, which greatly simplifies the engine.

All the bearings are made extra large, and with provision for adjustment to take up wear. The machinery is so arranged as to reduce jar and vibration to a minimum, and is thoroughly protected from dust and dirt.

The engine cylinders are steam jacketed, which, in connection with other methods of steam economy, resulting from design of motor and general mechanical arrangement, necessitates an extremely small consumption of steam for the power developed.



**BALDWIN PIANO BOX RUNABOUT  
WITH TOP LOWERED**

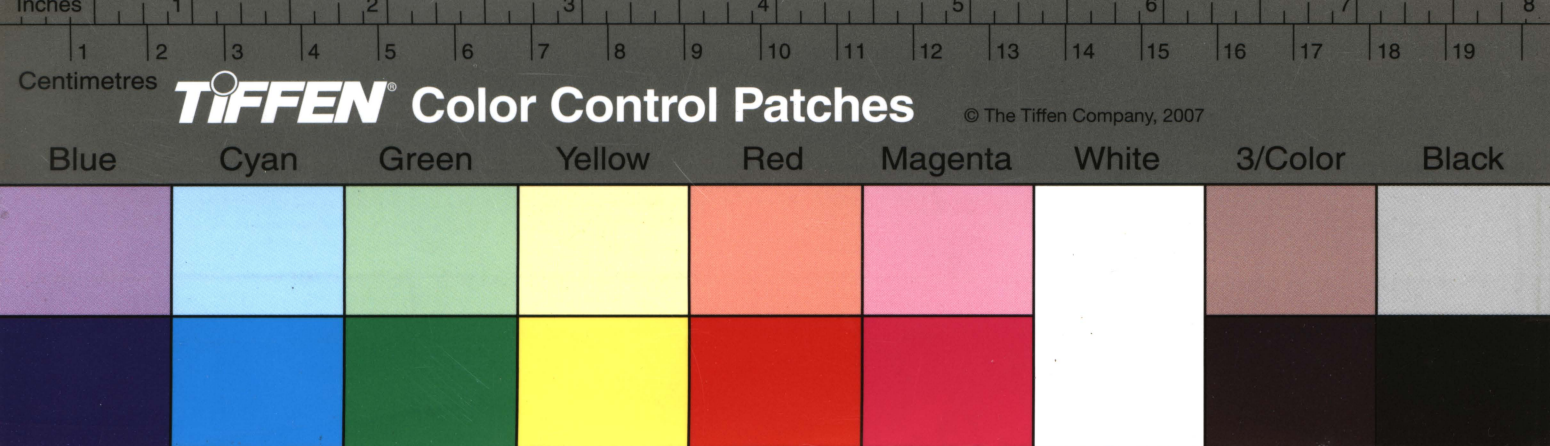
For Prices and Terms see Pages 17 and 19.



The exhaust steam, after leaving the cylinders, passes to our patented combined condenser, muffler and feed water heater, passing from it through our patented channels of further condensation to the water tank, which it reaches condensed and in condition for use again in the boiler for generating into steam. This practically rotary method of use of water results in extreme economy of not only water but fuel.

If for any reason, while traversing hilly roads, or while the engine is laboring under heavy strain, the condenser should not take care of all the exhaust steam, the surplus is carried to a patented device for the consumption of the excess exhaust, and is delivered at the exit in





an invisible condition, having no odor and perfectly noiseless discharge, thus overcoming some of the greatest objections to steam carriages now on the market.

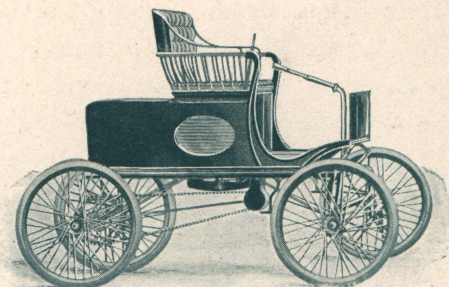
### FUEL

Liquid fuel is used ; either gasoline, or common kerosene. Gasoline is, however, preferable, as it generates a greater degree of heat.

### BURNER

One of the most important features of our carriage is the patented burner, which is partially extinguished and wholly relighted automatically, being under the control of the pressure of the boiler at all times. These devices are so arranged as to permit the vehicle to remain stationary for any time up to five hours without the loss of any steam by blowing off, etc., the shutting of valves or any other adjustments, and the carriage is ready for instant operation, without relighting the burners by hand, or other troublesome preparations which are usual although very annoying.

The fuel is fed to the burners under slight pressure, and is vaporized by passing through heated tubes. The pressure



**BALDWIN STANHOPE RUNABOUT**

For Prices and Terms see Pages 17 and 19.

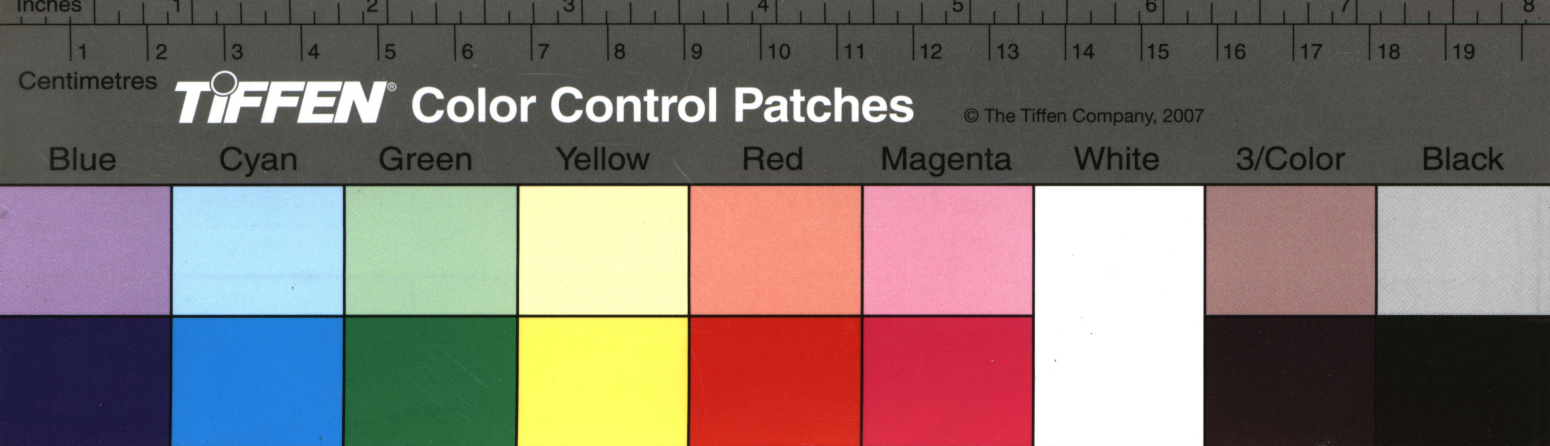


in the fuel tank is maintained by the expansion of the liquid fuel with heat generated by exhaust steam passing through a coil in the tank. This patented method of maintaining pressure obviates the necessity for hand pumping, which is resorted to by most, if not all, other makers of steam Automobiles. The pressure can be readily controlled by a valve very conveniently placed.

### REVERSING

Our method of reversing is further described under heading of "Engine." It does not require the shutting off of steam in case of emergency, but the reversing lever, which is under control





of the foot can be instantly operated. This lever is so placed as to prevent any possibility of unintentional reversing by the operator. While the reversing can be accomplished in case of necessity without previously shutting off steam, it is advisable, unless conditions require very prompt action, to first shut off steam, or do it simultaneously with the reversing. This method being easier on the machinery.

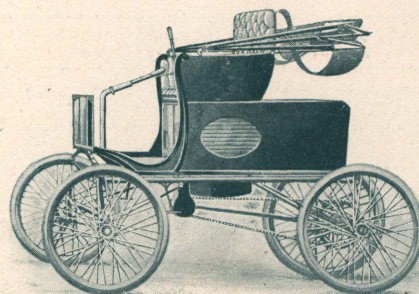
### WHEELS

To the construction of the wheels of the Baldwin Automobiles we ask particular attention. They are built of steel with very heavy spokes and nipples, and, as the span at the hub is made of an unusual width, our construction gives the wheels an enormous strength and overcomes the serious objection of buckling, known to some of the wheels now on the market.

### BRAKE

With two band brakes, as used on all our carriages, all possibility of accident through inability to control the machine

*This is my car.  
Don*



**BALDWIN STANHOPE RUNABOUT  
WITH BOW TOP**

For Prices and Terms see Pages 17 and 19.



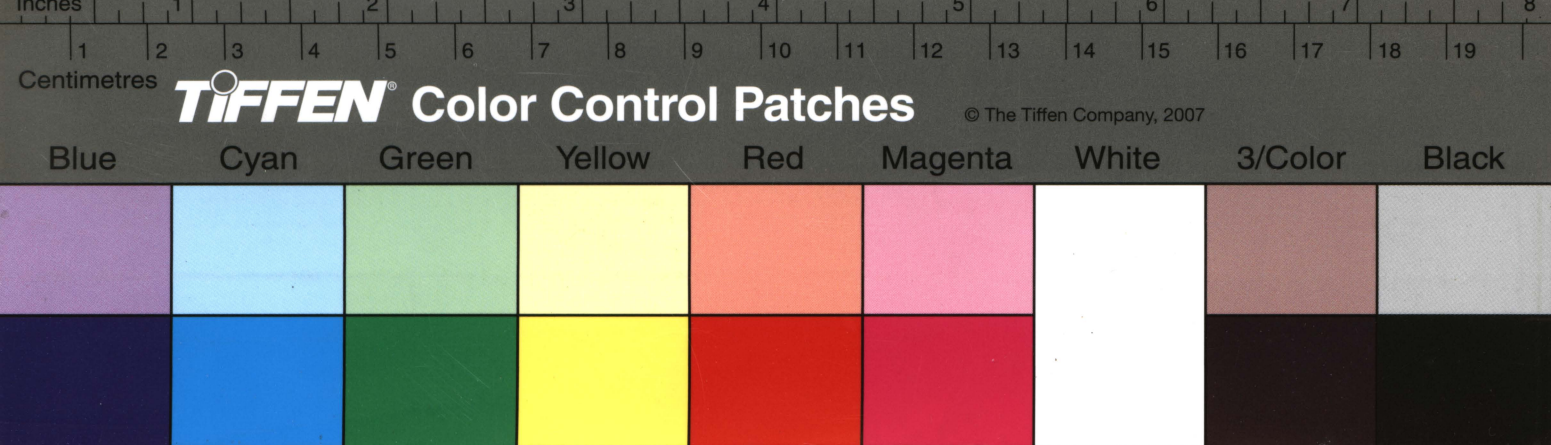
is obviated, as by a slight pressure of the foot upon the brake lever both bands are applied with instantaneous and positive results.

### GAUGES

Our design of water gauge is a very durable and practically unbreakable article. It is placed directly under the seat, and is reflected by a mirror which is securely fastened to the front part of the carriage within full view of the operator. The water gauge as used by us is the only one on the market that is guaranteed against breakage for one year.

The steam and air gauges are very conveniently placed in front of the operator, and can be easily read by him.





## NOISELESS OPERATION

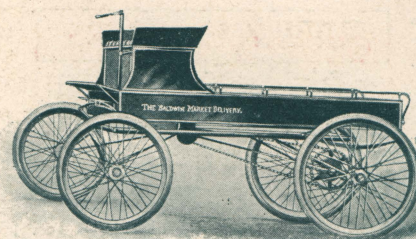
We have so designed our muffler as to overcome all disagreeable noise from exhaust, and the bearings and distances are so mechanically and scientifically arranged as to result in a practically noiseless operation of our Automobile.

## DISPOSITION OF SUR-PLUS HEAT

By our patented device any surplus heat is carried to the exit under the carriage.

## EQUALIZING GEAR

To provide for unusual strain to either rear wheel, we have devised a very important and satisfactory arrangement in a roller bearing and equalizing or differential gear combined, which takes all such strain from either driving wheel and equalizes same. Not only is the principle applied to the wheels, but the same idea is used in the frame proper, thus preventing any possibility of straining or forcing out of the true original line from actual operation.



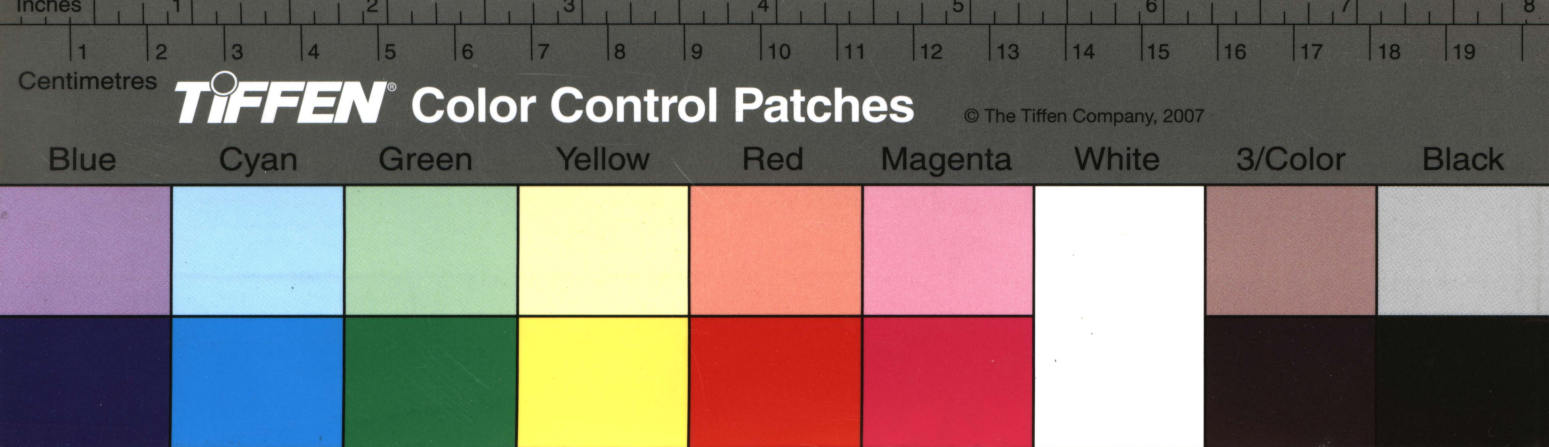
BALDWIN MARKET DELIVERY

For Prices and Terms see Pages 17 and 19.

## CARE OF EXHAUST

What to do with the visible exhaust is a subject which has puzzled many Automobile inventors, but it remained for the inventor of the Baldwin carriage to overcome this serious objection. By the use of our patented devices we are able to use fully 75 per cent. of the heat of the exhaust, and the balance is well taken care of in a manner previously described. By preventing the visible exhaust, we are able to pass through crowded thoroughfares without any fear of frightening horses.





## SUPPLY CARRIERS

Our fuel reservoirs are made after our own specifications, and are not the ordinary light tanks commonly used and made for other purposes. Both the gasoline and water tanks are arranged with separate apartments, thereby keeping the fuel at proper level.

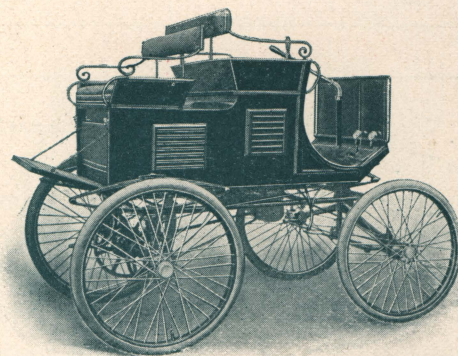
The capacity of these carriers depends entirely on style of carriage and work to be accomplished.

## TIRES

We use only the highest grade motor carriage tires, which are fully guaranteed. All correspondence respecting defects in tires should be addressed direct to the tire manufacturers.

## TESTS

Many severe tests have been given the Baldwin Automobiles. In a test on an incline from start made directly at foot of same, the Baldwin Automobile trap, weighing 950 pounds, climbed a 36 per cent. grade. After reversing and reaching a point within 15 feet of the base, the brakes were applied and the carriage



**BALDWIN TRAP**  
Rear Seat Removable

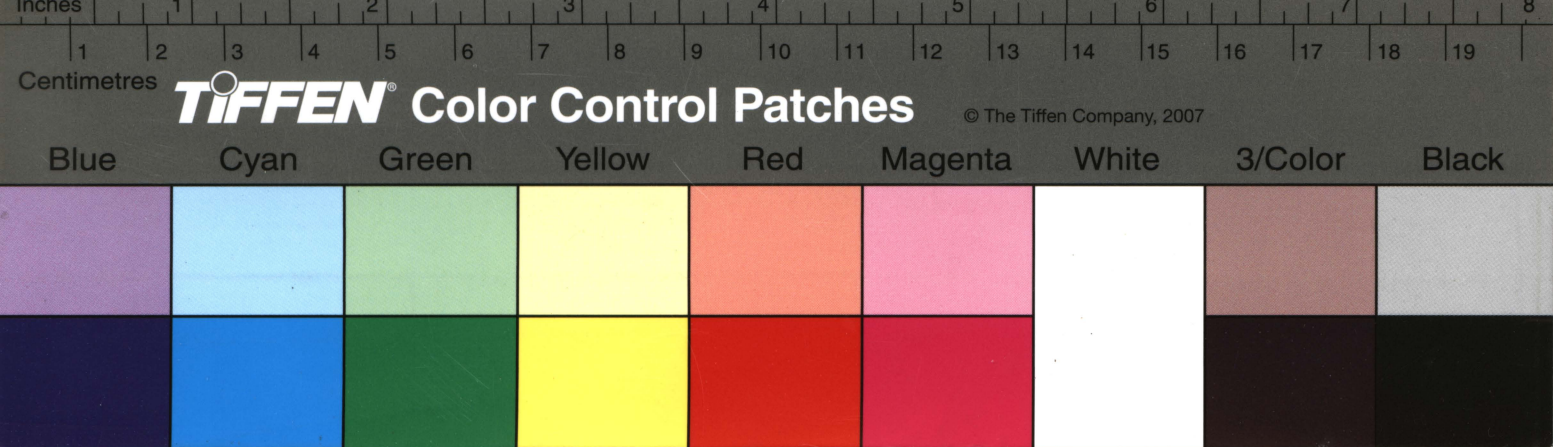
For Prices and Terms see Pages 18 and 19.

held its position. Power was then applied, and from that position on the grade it ascended to the top.

College Hill, the heaviest grade in Providence, R. I., had never been surmounted by an Automobile until the Baldwin carriage made the ascent. The grade of this hill is from 16 to 20 per cent. The Baldwin carriage is capable of starting and stopping on this grade with perfect ease.

In a road test at Connellsville, Penna., the Baldwin trap, with two passengers, covered a distance of two and one-half miles through mud and clay eight inches deep in twelve minutes. Several heavy grades averaging 18 per cent. were encountered during this trip.



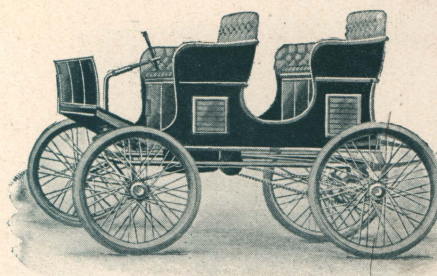


## PROVISIONS FOR SAFETY

We specifically refer in this paragraph to various appliances, which are parts of our Automobiles, for preventing accidents or damage to the machine from lack of knowledge, carelessness or oversight. We also refer to some of the features for automatically controlling various forces used in connection with the operation of our machines, most of these features being found exclusively in our Automobiles, and many of them being covered by patents owned by this Company.

While the pressure in the fuel tank is automatically maintained by method noted in paragraph describing the "Burner," there is a valve which, if necessary, can be used for controlling this pressure. When the boiler pressure reaches a point at which the regulator is set, the pressure valve, which is located in the pipe that conveys the fuel to the burners, closes and extinguishes all burners with the exception of the pilot light. In addition to this, should by any mishap this pressure valve fail to properly work, a pop safety valve is set for relieving the boiler at a slightly higher pressure.

Should water in the boiler go below a certain point, a plug in the boiler will



BALDWIN SURREY

For Prices and Terms see Pages 18 and 19.

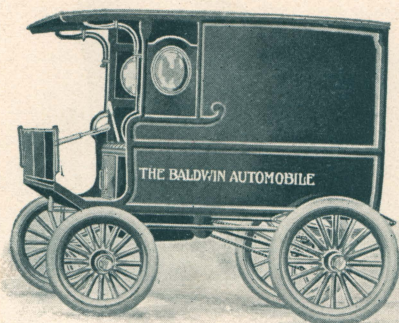
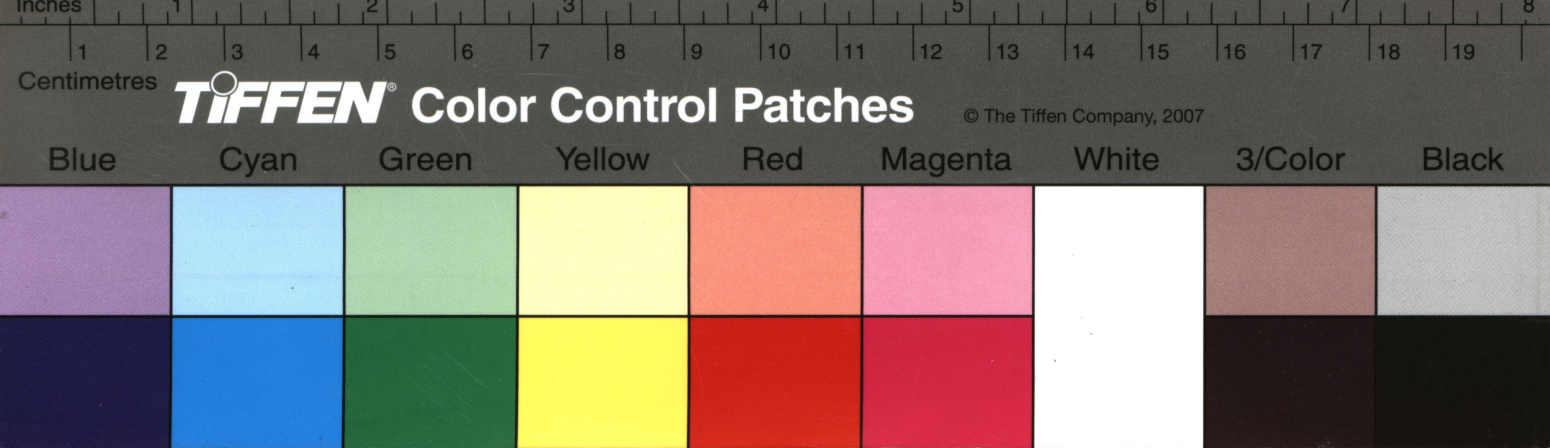


melt, allowing all the steam in same to enter the fire box, in a downward direction, which immediately extinguishes the burners, but still leaves two inches of water around the boiler tubes and on the lower crown sheet.

The boiler feed pump will, under ordinary conditions, keep the boiler properly supplied with water. Should this pump become inoperative or not furnish sufficient supply to the boiler, there is an auxiliary pump which can be used.

The breaking mechanism is very positive, sensitive, and exceedingly powerful, but should by any chance this mechanism fail to respond, the reversing lever for the motor can be instantly used, and the vehicle brought to an immediate standstill by this means.





### BALDWIN DELIVERY

For Prices and Terms see Pages 18 and 19.



There are other provisions for safety, and in fact all parts of our machines are made excessively strong and would under the most unusual circumstances properly perform their work. We have made provision whereby there is no dependence for safety on any one feature.

## PRICES

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### Baldwin Runabout

Piano box pattern, plain finished body, 28 inch wheels, solid rubber tires, upholstered in dark green or black . . . . .

**\$650**

Add \$50.00 if bow top is wanted.

### Baldwin Runabout

Piano box pattern, steel tangent spoked wheels, finest finished frame and enameled running gear, upholstered in leather or cloth, and best motor carriage tires, 30 inch wheels, 2½ inch tires . . . . .

**800.00**

Add \$50.00 if bow top is wanted.

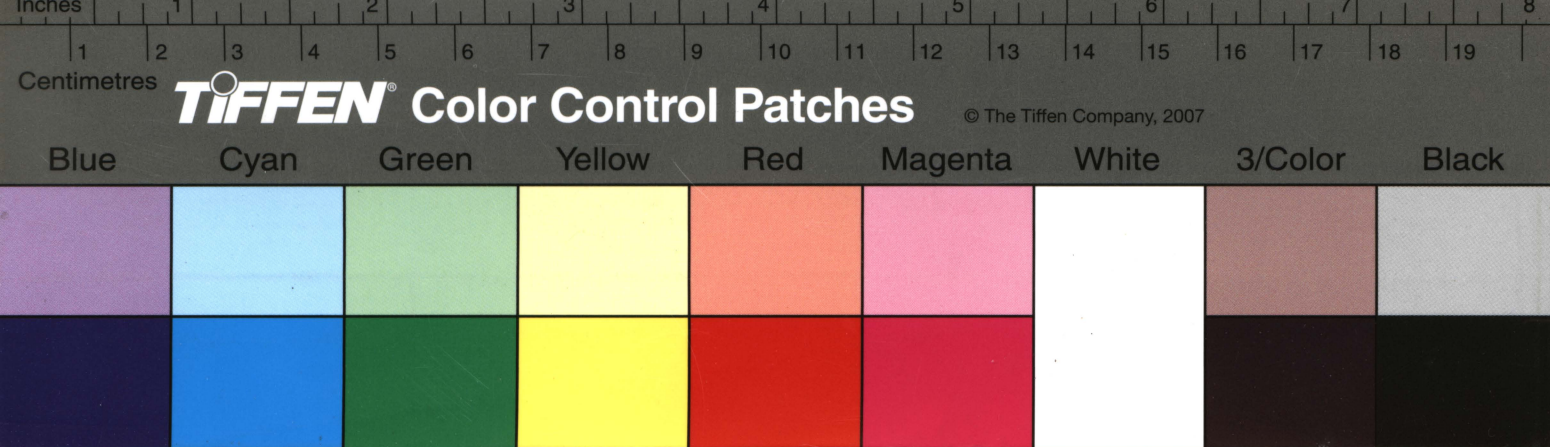
### Baldwin Stanhope

Very attractive, finely finished, upholstered in either leather or cloth, best motor carriage tires, 30 inch wheels, 2½ inch tires . . . . .

**800.00**

Add \$50.00 if bow top is wanted.





### Baldwin Market Delivery

Made especially for light grocery and market work, best of material throughout. **\$900.00**

### Baldwin Trap

For either two or four persons. Rear seat is removable, giving appearance of a very stylish English Rig. Best of material and workmanship. Finely finished and upholstered. . . . . **1200.00**

### Baldwin Surrey

An ideal touring or pleasure carriage. Finest finished carriage ever placed on the market. Highest grade in every respect . . . . . **1500.00**

### Baldwin Delivery

Designed and built for business. Will do the work for which it is intended. We can furnish either wood or metal wheels. . . . . **1500.00**

### TERMS

The catalogue list is the net price. Two hundred dollars of the purchase price must accompany the order on all carriages listing at \$1,000 or less, and 20 per cent. of list price on all carriages listing above that amount, and balance is due when Automobile is ready for delivery.

Prices given are invariably F. O. B. Factory.

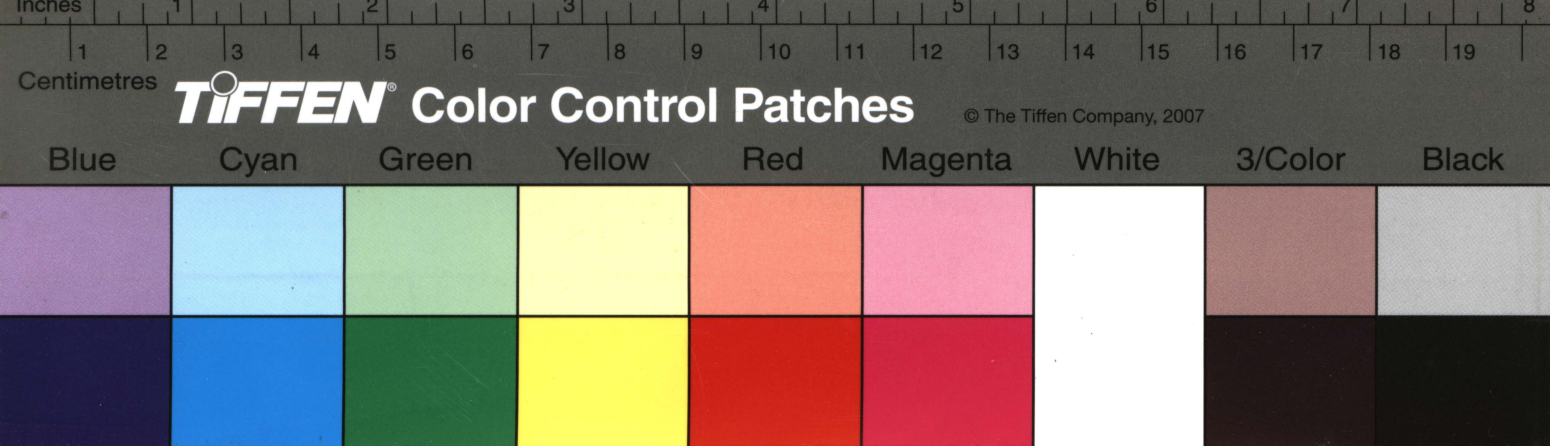


Our carriages can be seen and thoroughly tested at our factory or any of our agencies.



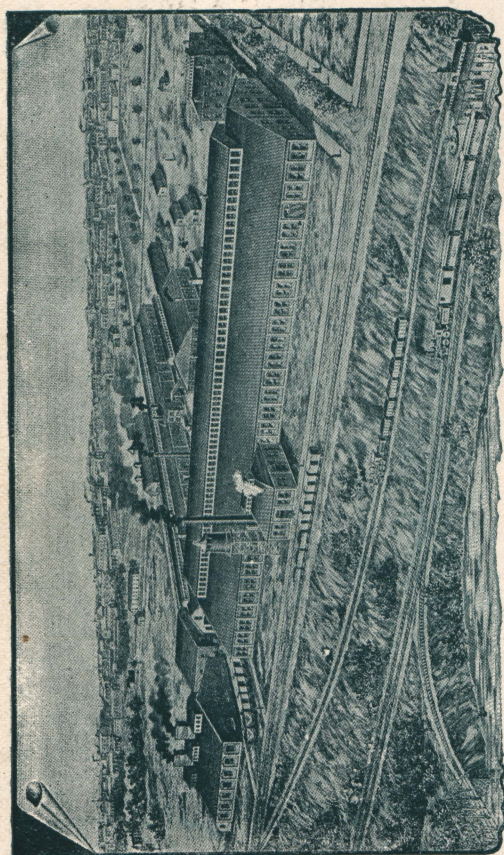
WE INVITE CORRESPONDENCE  
WITH INTERESTED PARTIES ❀





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Factory of  
BALDWIN AUTOMOBILE MANUFACTURING CO.,  
Connellsville, Penna.

OFFICERS AND DIRECTORS  
of  
Baldwin Automobile Mfg. Co.



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