Electric Vehicles

THE AJAX ELECTRIC RUNABOUT.

Light electric runabouts arranged to carry two persons have, within the past year or two, become very popular, especially on account of their simplicity, perfect control while in motion, convenience in manipulation, certainty of operation, inexpensiveness of maintenance and minimum degree of care required.

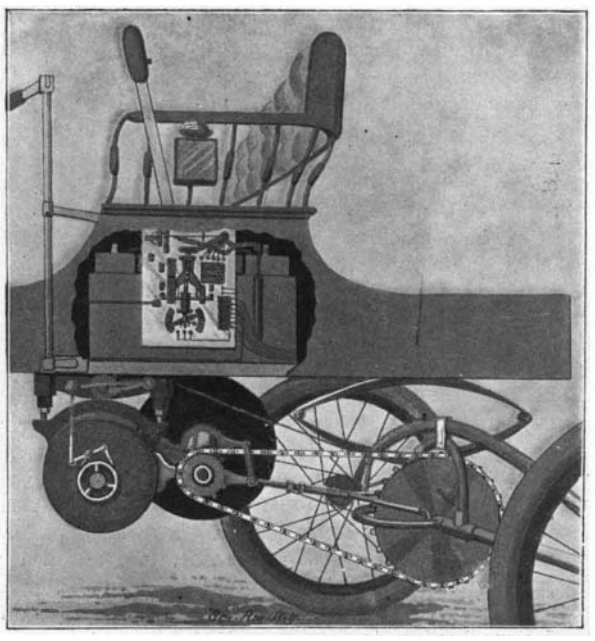
The vehicle shown in our illustrations is an improved type of runabout, designed to be of light but strong construction, capable of being handled without appreciable effort, and is economical in operation. It has been recently introduced by the Ajax Motor Vehicle Company, 220 West 36th Street, this city, and practical tests have demonstrated its durability and usefulness. The complete vehicle in operation is shown in one illustration, while the other exhibits two features of special construction that are new, and which are protected by American and foreign patents. One is the manner of hanging the motor by a hinge or flexible joint from the bottom of the wagon, having rubber or spring cushions on either side of the hinge, which gives to the motor a certain resiliency when the current is applied that relieves the back axle from undue strain. The other feature is the improved controller operated by the handle on the left of the seat near the lamp. In the portion of the body broken away are to be seen the storage batteries under the seat and in front, a slate slab supporting the controller switch. In general terms, as the power handle is moved from a vertical position either forward or backward raises the contact inverted Y central metal yoke switch until it makes contact with the flat spring fingers on the right for three or four different speeds. At the moment of contact a supplemental horizontal bar carrying carbon contacts on each end follows upward the Y-shaped piece and temporarily closes the circuit through same, thereby preventing sparking at the ends of Y main controller switch and prevents the burning or destruction of the metal contacts. A rod extends downward from the center of the Y contact switch into a solenoid and is in contact with a separate armature piston operating within the solenoid, having its lower end pivoted to a lever controller below, which in certain positions reverses the direction of the current. A small portion of the battery current is shunted through this solenoid coil when it is desired to make the solenoid armature piston follow the movement of the main switch rod. If the power handle is moved backward from a vertical position, bringing the controller at the bottom into adjustment for a reversal of the battery terminals, the motor will still move forward until the smaller switch button projecting outward from the handle is pressed inward, then the current is reversed and the vehicle moves backward. So that no matter what position the handle is in, the motor will rotate in a forward direction until the small handle reverse button is pressed.

The forward hinged handle is for steering, and on the motor armature shaft is arranged a simple brake to be applied there as well as a band brake to be applied in the rear, both of which are very effective. Behind the motor is the aluminium-cased gear wheel into which the motor pinion meshes, and from the sprocket pinion on the gear wheel shaft runs the sprocket chain to the rear axle sprocket driving wheel. A special brace rod forked at the rear end is located between the sprocket pinion and rear axle for the purpose of keeping the sprocket chain taut.

The tubing composing the running gear is of the best quality, and the wire wheels are equipped with durable pneumatic rubber tires. The weight of the vehicle holding twelve cells of storage battery is about 1,000 pounds. It has the usual volt and ampere meters. There is considerable storage room back of the seat, as the batteries only occupy the space under the seat.

The vehicle, as a whole, has a very attractive, neat appearance and, being comparatively light, will, on smooth roads and medium grades, travel a long distance on one discharge of the battery.

AJAX RUNABOUT.



AJAX RUNABOUT MECHANISM.

THE HOUSEBOAT "RANCOÇAS."

The original houseboat was not, as its name would seem to indicate, a floating home intended for travel by water. Indeed, as built and used in England today there is much more house than boat about the craft, the structure consisting merely of a kind of floating barge or dock, with living accommodations built upon it, which is moored in some quiet water, and is never intended to, and very rarely does, move from its first anchorage. The annually recurring aquatic festival at Henley-on-Thames, which has furnished so many subjects for the artist's brush and the camera, has rendered the outside world fairly well familiar with the English houseboat. The "boat," or scow, as it should more strictly be called, is generally a square-ended, shallow structure whose first and last purpose is the supporting of a structure, usually one story in height, which is divided up into the living and sleeping accommodations of the owner, the roof, or upper deck, being usually canvased over and tastefully decorated with shrubs and flowers.

When the houseboat was introduced into this country it was inevitable that it should receive considerable modification. The first and obvious change was to make it more worthy of its name, and give it some of the mobility which is lacking in its Englsh prototype. The square-ended scow hull gave place to a hull that was more entitled to the term "boat," and the change was made without detracting in any way from the purposes and uses of the houseboat as such. By giving the hull a shapely bow and stern and ample rudder control the craft became navigable at once, and capable of being taken in tow or moved by her own engines, not merely between closely adjacent seaside or river resorts, but over distances of, if need be, several hundred miles.

As illustrating a first-class houseboat of this type we present the accompanying views of the "Rancocas," owned by Thomas Dolan, of Philadelphia. The vessel was designed by the well-known firm of Messrs. Tams, Lemoine & Crane, of New York city. The length over all is 108 feet; waterline length 100 feet; the beam, 17 feet 6 inches; and the draft, 2 feet 6 inches. The shallow draft adapts the boat for the shoal waters which are found in bays and estuaries and the shallow rivers of the South. Over the deckhouse is an awning deck provided with frames suitable for stretching an awning for use in summer weather. This gives an unbroken promenade or lounging place, some 85 feet in length by 17 feet in width.

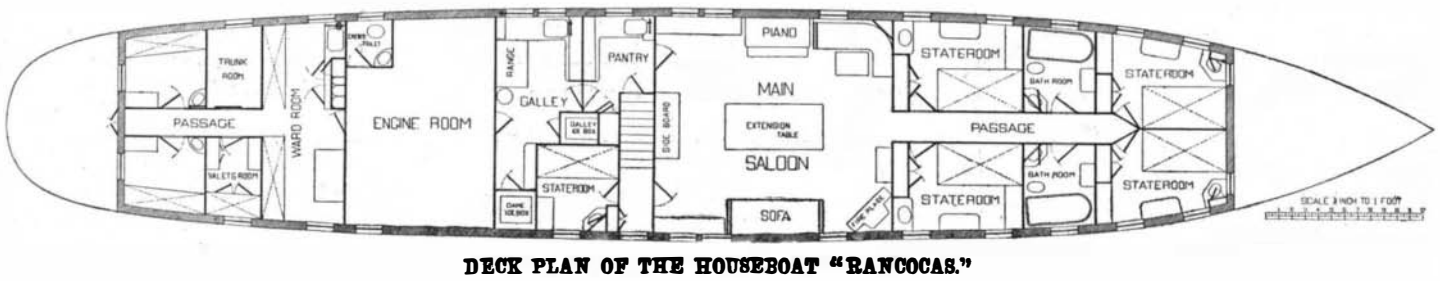
In the forward deckhouse are four bedrooms, with a bathroom serving each two rooms. Then comes the main saloon, which is about 18 feet by 16 feet, and is arranged as in a house on land, with open fireplace, bookcase, sideboard, divan, piano, writing desk, dining table and reading table.

Aft of the saloon, on one side, is a room with two berths for maids. On the other side is a commodious pantry, between which is the companionway leading to the upper deck. Next to the pantry is the galley, aft of which comes the machinery space; while in the extreme after end of the boat are the officers' quarters. In the officers' quarters there are rooms for the valet and a trunk-room. There is also a separate iceroom for the storage of game, and a gunroom.

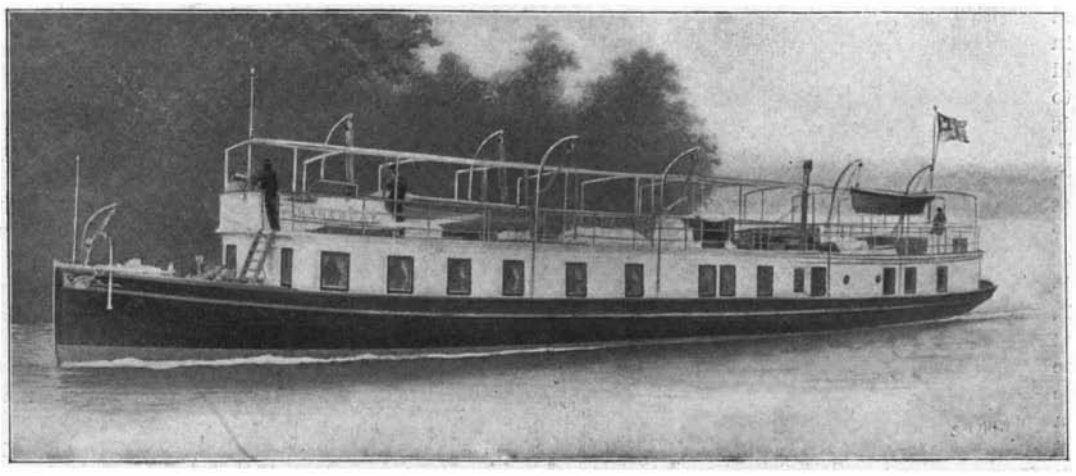
The vessel is lighted by electricity, and is heated with steam heat throughout.

The motive power consists of two 75 horse power gas engines, which drive the boat at a speed of about ten miles an hour.

The finish below is plain and substantial, the walls being white enamel finish, and the furniture mahogany. The main saloon is finished in so-called Colonial style, with open fireplace with tiled hearth. The floor of the main saloon is hardwood, a rug being used instead of carpet. That the "Rancocas" is a seaworthy craft has been proved by her successful and lengthy tours in Southern waters.



DECK PLAN OF THE HOUSEBOAT "RANCOCAS."



Length over all, 108 feet. Beam, 17 feet 6 inches. Speed, 10 knots.

THE HOUSEBOAT "RANCOCAS."

On Tuesday evening, February 11, Dr. S. Sheldon, of the Brooklyn Polytechnic Institute, gave an experimental lecture before the Automobile Club of America on "The Storage Battery." Dr. Sheldon discussed electrolytes and showed by means of a galvanometer projected on a screen by a stereopticon, how the resistance of these fluids decreases when they are heated, and they act just the opposite of an ordinary conductor. Some views were shown of a few representative cells of American make, and a sample Edison cell was also exhibited as well as a discharge curve of the first discharge from the first machine-made Edison cell, which has just been completed.

The fuse in one of the motors on the Liverpool Overhead Railway burnt out a short time ago while in a tunnel. Fire was communicated to the car, which in turn ignited some piles of creosoted ties which, for some inexplicable reason, were stored alongside the track. The result was a serious conflagration, and several employés of the road were killed.