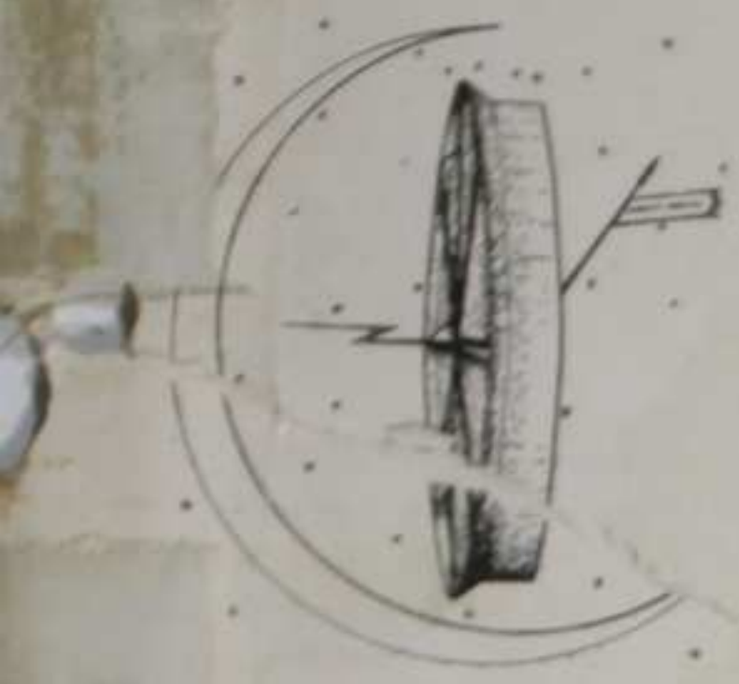

THE AEROPINION

PURPOSES.

Office:

Gates Building,

1367 Broadway,

Brooklyn, N. Y. City.

THE AEROPINION AND ITS PURPOSES.

THE AEROPINION which is here shown in action, is a new and improved appliance, affording the fullest and most positive resistance obtainable from the column of air with which, when in operation, it comes in contact, scrupulously delivering the full and unimpaired measure of power transmitted to it. When revolving at a working velocity it literally devours its passage through the air. The enlarged peak allowing a broad core of air to be continuously drawn in by the screw, rotary and forward movements which is compressed through the waistband and forced against the points of greatest leverage on the blades. Exactly the same volume of air emerges from the rear that entered at the front. By varying the flare of the peak and the taper of the hub case, the discharge current may be concentrated to any compass or direction for such purposes as cooling motors. The manner of construction renders it practically indestructable by speeding. Every part is securely bound together at both hub and periphery and all protected by the bonnet. It cannot buckle or break and is safe from external causes of damage, is the only device adapted by construction to elevate a vehicle vertically through the air, which is the first and indispensible quality of an air-vessel.

Twin Aeropinions though each running at the same number of R. P. M. by doubling the area of resistance, deminish the slip and increase the speed. For propelling vehicles of various demensions and forms the number of aeropinions, their size and the pitch of the blades will be modified according to the intended purposes. One of the most important uses however, is the propulsion of the Aerocar over various surfaces, solid or liquid, loose or firm.

The first car run on the road weighed 1250 lbs covered 16 m. p. h. with only 5 H. P., and the first car run over ice weighed 850 lbs. covered 20 m. p. h. with only 2¾ H. P. A conclusive evidence of superior ability as a propeller, those in use being notoriously wasteful of power.

The steel-shod car propelled by air over ICE has few wheels and contrivances to eat up power, no fricton between it and the slippery ice and practically none between it and the air, has direct transmission and all the power applied without loss to the base of resistance. The first little 2¾ H. P. car carried six men swiftly along, cutting figures on the ice with curves of 18 ft. diameter and responded perfectly to the directions of the steerman in starting, stopping and running before, against and across the wind.

From results obtained it seems logically unlikely that future discovery will much improve upon such a favorable combination of conditions for speed, as this nearly frictionless air propulsion of polished metal over the slippery surface of the ice. Other kinds of power may be used with advantage, the details of construction made more favorable, but in principle, the Aerocar is likely to become and remain the speed champion vehicle of the world.

The only vehicle heretofore showing great speed over ice is the Iceboat propelled by sails, and at the caprice of any wind that blows, incapable of use for any definite commercial purpose as a transport and devoid of accommodation or comfort.

This car on the contrary is operated in perfect comfort and safety; may be guided with precision at any rate of speed desired, it is under perfect control of the operator, who can turn it about at will, sail it in any direction independent of the wind and stop its progress almost instantly.

In the North it will practically and quickly supercede the Reindeer, the Dogsled, the Ice-boat, the Sleigh and the Scooter. Its overwhelming superiority in comfort, convenience and dispatch will revolutionize the entire traffic of the North, producing a literal monopoly, because its advent increases the average rate of ice travel from 4 to 50 miles an hour or more than ten times and with high powered motors fifty times.

A business trip or journey—that under present conditions would require twenty days to accomplish is performed in two, and liability to delay, accident, disease or death, reduced in the same ratio.

Then the cost is but a fraction while the profits are multiplied. The performance and possibilities of the car are a revelation and a wonder. An advance of ten thousand years at one step, bestowing upon the great North, so long neglected, the swiftest form of transportation known, which needs no rail or roadbed, no signal tower or switch but steers its own uncharted course over river and lake and sea.

It presents the freedom of this vast northern continent to a whole world, not by the mere symbolism of a gilded key in a velvet casket but by an irresistable whirlwind rushing the conquering chariot over the vanquished ice barrier, which has from the beginning of time remained impregnable to man.

The limit of this vehicle's speed will only be found with the extreme of velocity at which such machinery may be driven. Before that point has been reached however, all records will have been left far behind and the go like the wind, fascination of mankind will have had ample opportunity to be fully gratified.

This method of transportation both creates and fills a new sphere exclusively its own.

Myriads of vehicles will be required to supply the new found want of the Great North alone.

The car for water may be made of any form of hull desired. The shallow skimming model of light draught tapering to nothing at the bow, with propeller on deck is best fitted to slip easily over sunken obstacles or submarine vegitation, and penetrate waters hitherto closed to navigation. Equipped with runners in winter it may successfully skim over either water or ice without danger to the machinery.

For transportation OVERLAND the Aerocar is capable of greater speed than all other vehicles on wheels. Having duplex transmission it may be propelled by either screw or wheel. It is capable of accomplishing all the work of other wheeled vehicles and much besides, never before performed. With similar and equal power it is superior to the automobile in speed, is easier controlled, safer and better adapted to the requirements of travel over varied surfaces. It has less machinery, weight, friction, and its wheels run free and independent, dispensing with differential gear, water, water jacket, and tank, pipes, radiator and pump. The power diverted by the pump is added for propulsion, regulation of speed by spark and throttle, cuts speed gears out. Wheels, axles and frame are therefore lighter.

Then it's grip being on the elastic air the grip of the broad tire on the road is not needed as a fulcrum on which to turn the wheels.

Tires of one third the width come in contact with only one third the irregularities of surface, with corresponding amount of vibration.

The car itself moves directly and positively forward, propelled by resistance of the air to the motion of the blades, the wheels turn merely by their contact with the surface.

These circumstances enable the car on wheels to run without a slip over ice faster than over land, a thing impossible for an automobile. When fitted with skates as shown it runs faster still.

The car is also furnished with runners attached to the axles and knuckle joints which are quickly adjusted to take the place of the wheels over the frozen surface, or, equipped with loose skates and wheel chocks as shown and when provided with an adjustable hull on which it may be sailed over water it is amphibious and fit for ice as well.

A journey may be prosecuted over all kinds of surface. It will run over the road, cross the desert, the lake and the icefield in succession performing the threefold function of automobile, launch and iceboat, excelling in versality of purpose all other vehicles combined.

A car for navigation of the AIR furnished with a 10x5 ft. elevating and 52x10 in. propelling Aeropinions together with frame, shafting, motor etc. weighing 1056 lbs , may be elevated vertically through the air 1000ft., in 16 minutes, and maintained at such altitude or propelled in any direction desired without kite, balloon, wing, aeroplane, rudder or any other contrivance, by the use of 20 H. P. of a 30 H. P. gasolene motor.

The amount of power required to raise the vehicle must not only be transmitted to the propellers but must be delivered by them intact upon the air, *that* has never before been accomplished.

It converts an air current into power or power into an air current with equal facility utilizing the WIND on a row of five, ten or more of those devices with superior concentration and force than can be obtained by the wind-mills used for driving dynamos in Dusseldorf, Nershaux and in Schleswig Holstein, the butter churning wind-mills of Holland and pumping wind-mills of the United States.

It affords an almost universal method of transit and enters upon a field of usefulness more varied and extensive than that available to any or all other methods heretofore used. Its possibilities in ice and water transportation are beyond reach by any other means.

No improvement in the interest of transportation of so vast a scope and so auspicious a future was ever launched. It improves upon every branch of transit and though far removed from the beaten track of current invention will at once become an imperative necessity throughout extensive sections of country.

The field on this continent open to its benefits reaches from the Pole to the Gulf and from Cape Race to Unalaska, embracing numberless rich and populous cities, towns, and Villages, a hundred million people who daily traverse thousands of miles of road, and lake and river, much of it being solidly frozen from two to eight months in each year and much of it though in liquid form impenetrable by any other means.

This system of transportation is worthy of consideration and encouragement by those departments of government interested in rapid communication throughout their territory.

The Post Office, Interior, Treasury, Agricultural and particularly by the War and Navy departments Vehicles may be made adapted to all branches of the service, with skeleton frames and powerful motors they will make the swiftest races ever run.

For purposes of pleasure and long journeys they may be fitted with all accommodations and means of travel for almost every condition of route. For arctic exploration with steel hull, aluminum deck and steering turret, protection and provisions for their crews. A few of such cars could find the safest route and traverse the distance quickly while the short season lasts.

Armed and fitted for sudden descent on the shores of the frozen rivers and inlets of a hostile nation, their superlative speed over ice would enable them to harass an enemy at unprotected points

It may be safely said that on their introduction they will be generally adopted and enjoy a constantly increasing demand. In such an advantageous and unexplored field, with no competition in sight great numbers must be required which cannot fail to realize large profits for the companies or individuals engaged in their manufacture and sale.

The new transport appears in the knick of time when the rush of invasion to the great North for wealth and settlement now swelling to vast proportions, is blocked by the ice barrier from September to May of each year.

Communications from those who incline to place an order for a car and from those disposed to take an interest in this enterprise of much promise will be fully and promptly answered and the ability of the Aeropinion when run by a high power motor of say 50 H. P. may be approximately estimated by seeing it with 5 H. P. propel a heavy car swiftly along the road and more swiftly over the ice when that is available.

Address Aeropinion Office, 1367 Broadway, Brooklyn, N. Y