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The Automobile is Fast Becoming Not Only a Vehicle of Pleasure, but the "Jack of all Trades" on the Farm

DEVELOPMENTS of the automobile is a fair representation of the active temperament and the controlled energy of our genuis. This progress in scientific effort has placed mechanical reputation on the very top round of progression, and the wonder of the entire world increases when it is realized that the history of this marvelous achievement dates back but a few years.

ment dates back but a few years. Sixteen years ago the automobile was simply a horseless carriage with springs not fit to be called such, with no pneumatic tires and with but little to recommend it in any way. The sensation of riding in one was far from pleasant, producing the feeling that you are sitting over a minia-ture volcano which frightened you with its mutterings and was likely to explode itself without a moment's warning. It had no practicability and was, in fact, but a toy for the adventurous rich. It is true there had been a vague idea of an automobile or something akin to one, in the minds of some people for years, and this idea was worked out and demonstrated by Gottlich Daimler, a German engineer. He devised and built the first successful motor, and it was taken up and demonstrated by the French firm, Panhard and Levassor, whose products have been known all over the world. This was twenty-five years ago, and following it the foreign manufacturers placed machines upon the market, but they were designed only for travel over the best roads and under certain and assured conditions, and were accessible only to the very wealthy man and were used for his pleas-

ure alone. It was left for more

recent inventors and engineers to

produce the automobile of to-

day, and this transforming of

forces which nature holds into

practically applied mechanical

power is nowhere more manifest

than in the development of the

automobile. It is no longer an

experiment but a recognized and

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If Not For The Farmer Then Who?

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accepted necessity of commercial and agricultural life.

When the automobile first made its appearance even the best informed mechanics questioned its practicability on common country roads. Engines had been used for years on railroads where traction was sure and even surface was provided so that wear and tear were reduced to a mini-

of the motley caravan which is fast disappearing into the most of discarded things. A hundred parts have been done away with and the engines are now so simple that any one can operate them and locate difficulties and correct them. The present day automobile engine is fool-proof. You can get at the movable parts without taking the engine to



SINTY-ONE YEARS AGO!

Start of the first horseless carriage trip in New York. The date was 1855 and among the notables in the picture are the Mayor, Chief of Police and Richard Dudgeon, inventor of the wonderful steam wagon.

mum, but to pack an engine on a frame and so adjust it that it could and would propel itself over the hills and through the ditches of uneven country roads, was a proposition that demanded not only mechanical genius but the very highest type of workman-The first gasoline engines were stationary and were operated by explosions. It was thought necessary to provide a bed of concrete for those engines of "hot tube ignition" and clumsy construction. These gasoline en-gines were things of many troubles, but they have been relegated to the past and can be seen trailing along at the end of the line

pieces, and the owner is able to keep his machine in perfect repair with little trouble or expense. It has been the problem of the manufacturer to build an automobile that would plough through sand and mud and over ruts and stones, with an engine powerful enough to drive the car up steep grades and still admit of being throttled to the desired limit. Five years ago it was a common thing to see a machine by the roadside and the driver under the car, much to the amusement of many of our country citizens, but that is a thing of the past, and today the farmer is the strongest advocate of the practicability of

the automobile to the agriculturist. It is fast becoming a necessity, and he is not slow in recognizing the fact.

The farmer has the reputation of being conservative to the extreme, and this opinion was not changed in the minds of people by the attitude he at first assumed towards the automobile when it made its appearance along his peaceful highway. He looked upon it as an interloper, a nuisance and a thing to be condemned. There was just reason for this opinion, too, because the machine seemed to do little else than raise a dust and cause stampede among his stock. To the farmer it represented only the selfishness of capital and the touch of antagonism, but the farmer of to-day stands squarely for progression and the secrets of the larger progress are wrested from all sides of his experience, so it is not surprising that he has passed the point of tolerance and has accepted, and is using the automobile to a very large extent. The automobile is rapidly becoming the farmer's machine. To the city man it is counted a luxury, ninetynine cases out of a hundred, but the farmer has recognized his advantage and is placing the automobile among his necessities. He is a logical thinker, and no point of advantage escapes him. long experience with farm machinery has made him a mechanic, and the automobile finds in him an appreciative owner. farmer is ingenious; it has been necessary for him to develop every capability he has possessed along mechanical lines, and when the automobile took its place among his chattels he set about to prove its worth on the farm. He is original as well as ingenious, and has turned his car into various uses not dreamed of by the manufacturer when it was placed upon the market, has learned the secret of its power, and by clamping a pulley to the hub of the rear wheel of the machine, jacking the wheel up, he belts it to his pump or feed-chop-This means economy of labor and time. The auto runs the grindstone and turns the