

## CHAPTER 1

# Some Preliminary Observations

### THE MADDING CROWD

Any woman can drive an electric automobile, any man can drive a steam, but neither man nor woman can drive a gasoline; it follows its own odorous will, and goes or goes not as it feels disposed.

For this very wilfulness the gasoline motor is the most fascinating machine of all. It possesses the subtle attraction of caprice; it constantly offers something to overcome; as in golf, you start out each time to beat your own record. The machine is your tricky and resourceful opponent. When you think it conquered and well-broken to harness, submissive and resigned to your will, behold it is as obstinate as a mule, — balks, kicks, snorts, puffs, blows, or, what is worse, refuses to kick, snort, puff, and blow, but stands in stubborn silence, an obdurate beast which no amount of coaxing, cajoling, cranking will start.

One of the beauties of the beast is its strict impartiality. It shows no more deference to maker than to owner; it moves no more quickly for expert mechanic than for amateur driver. When it balks, it balks, — inventor, manufacturer, mechanic, stand puzzled; suddenly it starts, — they are equally puzzled.

Who has not seen inventors of these capricious motors standing by the roadside scratching their heads in despair, utterly at a loss to know why the stubborn thing does not go? Who has not seen skilled mechanics in blue jeans and unskilled amateurs in jeans of leather, so to speak, flat on their backs under the vehicle, peering upward into the intricacies of the mechanism, trying to find the cause, — the obscure, the hidden source of all their trouble? And then the probing with wires, the tugs with wrenches, the wrestling with screw-drivers, the many trials, — for the most part futile, — the subdued language of the bunkers, and at length, when least expected, a start, and the machine goes off as if nothing at all had been the matter. It is then the skilled driver looks wise and does not betray his surprise to the gaping crowd, just looks as if the start were the anticipated

result of his well-directed efforts instead of a chance hit amidst blind gropings.

One cannot but sympathize with the vanity of the French chauffeur who stops his machine in the midst of a crowd when it is working perfectly, makes a few idle passes with wrenches and oil-cans, pulls a lever and is off, all for the pleasure of hearing the populace remark, "He understands his machine. He is a good one." While the poor fellow, who really is in trouble, sweats and groans and all but swears as he works in vain to find what is the matter, to the delight of the onlookers who laugh at what seems to them ignorance and lack of skill.

And why should not these things be? Is not the crowd multitude always with us—or against us? There is no spot so dreary, no country so waste, no highway so far removed from the habitations and haunts of man that a crowd of gaping people will not spring up when an automobile stops for repairs. Choose a plain, the broad expanse of which is unbroken by a sign of man; a wood, the depths of which baffle the eye and tangle the foot; let your automobile stop for so long as sixty seconds, and the populace begin to gather, with the small boy in the van; like birds of prey they perch upon all parts of the machine, choosing by quick intuition those parts most susceptible to injury from weight and contact, until you scarcely can move and do the things you have to do.

The curiosity of the small boy is the forerunner of knowledge, and must be satisfied. It is quite idle to tell him to "Keep away!"; it is worse than useless to lose your temper and order him to "Clear out!"; it is a physical impossibility for him to do either; the law of his being requires him to remain where he is and to indefatigably get in the way. If he did not pry into everything and ask a thousand questions, the thoughtful observer would be fearful lest he were an idiot.

The American small boy is not idiotic; tested by his curiosity concerning automobiles, he is the fruition of the centuries, the genius the world is awaiting, the coming ruler of men and empires, or—who knows?—the coming master of the automobile.

Happily, curiosity is not confined to the small boy; it is but partially suppressed in his elders,—and that is lucky, for his elders, and their horses, can often help.

The young chauffeur is panicky if he comes to a stop on a lonely road, where no human habitation is visible; he fears he may never get away, that no help will come; that he must abandon his machine and walk miles

for assistance. The old chauffeur knows better. It matters not to him how lonely the road, how remote the spot, one or two plaintive blasts of the horn and, like mushrooms, human beings begin to spring up; whence they come is a mystery to you; why they come equally a mystery to them, but come they will, and to help they are willing, to the harnessing of horses and the dragging of the heavy machine to such place as you desire.

This willingness, not to say eagerness, on the part of the farmer, the truckman, the liveryman, in short, the owner of horses, to help out a machine he despises, which frightens his horses and causes him no end of trouble, is an interesting trait of human nature; a veritable heaping of coals of fire. So long as the machine is careering along in the full tide of glory, clearing and monopolizing the highway, the horse owner wishes it in Hades; but let the machine get into trouble, and the same horse owner will pull up out of the ditch into which he has been driven, hitch his horses to the cause of his scare, haul it to his stable, and make room by turning his Sunday carryall into the lane, and four farmers, three truckmen, and two liverymen out of five will refuse all offers of payment for their trouble.

But how galling to the pride of the automobilist to see a pair of horses patiently pulling his machine along the highway, and how he fights against such an unnatural ending of a day's run.

The real chauffeur, the man who knows his machine, who can run it, who is something more than a puller of levers and a twister of wheels, will not seek or permit the aid of horse or any other power, except where the trouble is such that no human ingenuity can repair on the road.

It is seldom the difficulty is such that repairs cannot be made on the spot. The novice looks on in despair, the experienced driver considers a moment, makes use of the tools and few things he has with him, and goes on.

It is astonishing how much can be done with few tools and practically no supplies. A packing blows out; if you have no asbestos, brown paper, or even newspaper saturated with oil, will do for the time being; if a wheel has to be taken off, a fence-rail makes an excellent jack; if a chain is to be riveted, an axe or even a stone makes a good dolly-bar and your wrench an excellent riveting hammer; if screws, or nuts, or bolts drop off, — and they do, — and you have no extra, a glance at the machine is sure to disclose duplicates that can be removed temporarily to the more essential places.

Then, too, no one has ever exhausted the limitless resources of a farmer's wagon-shed. In it you find the accumulations of generations, bits of every conceivable thing, — all rusty, of course, and seemingly worthless, but sure to serve your purpose on a pinch, and so accessible, never locked; just go in and help yourself. Nowadays farmers use and abuse so much complicated machinery, that it is more than likely one could construct entire an automobile from the odds and ends of a half-dozen farm-yards.

All boys and most girls — under twelve — say, "Gimme a ride;" some boys and a few girls — over twelve — say, "You look lonesome, mister." What the hoodlums of the cities say will hardly bear repetition. In spite of its swiftness the automobile offers opportunities for studying human nature appreciated only by the driver.

The city hoodlum is a most aggressive individual; he is not invariably in tattered clothes, and is by no means confined to the alleys and side streets. The hoodlum element is a constituent part of human nature, present in everyone; the classification of the individual depending simply upon the depth at which the turbulent element is buried, upon the number and thickness of the overlying strata of civilization and refinement. In the recognized hoodlum the obnoxious element is quite at the surface; in the best of us it is only too apt to break forth, — no man can be considered an absolutely extinct volcano.

One can readily understand why owners and drivers of horses should feel and even exhibit a marked aversion towards the automobile, since, from their stand-point, it is an unmitigated nuisance; but why the hoodlums who stand about the street corners should be animated by a seemingly irresistible desire to hurl stones and brickbats — as well as epithets — at passing automobiles is a mystery worth solving; it presents an interesting problem in psychology. What is the mental process occasioned by the sudden appearance of an automobile, and which results in the hurling of the first missile which comes to hand? It must be a reversion to savage instincts, the instinct of the chase; something strange comes quickly into view; it makes a strange noise, emits, perhaps, a strange odor, is passing quickly and about to escape; it must be killed, hence the brickbat. Uncontrollable impulse! poor hoodlum, he cannot help it; if he could restrain the hand and stay the brickbat he would not be a hoodlum, but a man. Time and custom have tamed him so that he lets horses, bicycles, and carriages pass; he can't quite help slinging a stone at an advertising van or any strange vehicle, while the automobile is altogether too much.

That it is the machine which rouses his savage instincts is clear from the fact that rarely is anything thrown at the occupants. Complete satisfaction is found in hitting the thing itself; no doubt regret would be felt if anyone were injured, but if the stone resounds upon the iron frame of the moving devil, the satisfaction is felt that the best of us might experience from hitting the scaly sides of a slumbering sea-monster, for hit him we would, though at immediate risk of perdition.

The American hoodlum has, withal, his good points. If you are not in trouble, he will revile and stone you; if in trouble, he will commiserate and assist. He is quick to put his shoulder to the wheel and push, pull or lift; often with mechanical insight superior to the unfortunate driver he will discern the difficulty and suggest the remedy; dirt has no terrors for him, oil is his delight, grease the goal of his desires; mind you, all this concerns the American hoodlum or the hoodlum of indefinite or of Irish extraction; it applies not to the Teutonic or other hoodlum. He will pass you by with phlegmatic indifference, he will not throw things at you, neither will he help you unless strongly appealed to, and then not over-zealously or over-intelligently; his application is short-lived and he hurries on; but the other hoodlum will stay with you all night if necessary, finding, no doubt, the automobile a pleasant diversion from a bed on the grass.

But the dissension a quarter will cause! A battle royal was once produced by a dollar. They had all assisted, but, like the workers in the vineyard, some had come early and some late. The automobile, in trying to turn on a narrow road, had dropped off the side into low wet ground; the early comers could not quite get it back, but with the aid of the later it was done; the division of a dollar left behind raised the old, old problem. Unhappily, it fell into the hands of a late comer for distribution, and it was his contention that the final lift did the work, that all previous effort was so much wasted energy; the early comers contended that the reward should be in proportion to expenditure of time and muscle and not measured by actual achievement, — a discussion not without force on both sides, but cut short by a scrimmage involving far more force than the discussion. All of which goes to show the disturbing influence of money, for in all truth those who had assisted did not expect any reward; they first laughed to see the machine in the ditch, and then turned to like tigers to get it out.

This whole question of paying for services in connection with

automobiling is as interesting as it is new. The people are not adjusted to the strange vehicle. A man with a white elephant could probably travel from New York to San Francisco without disbursing a penny for the keeping of his animal. Farmers and even liverymen would keep and feed it on the way without charge. It is a good deal so with an automobile; it is still sufficiently a curiosity to command respect and attention. The farmer is glad to have it stop in front of his door or put up in his shed; he will supply it with oil and water. The blacksmith would rather have it stop at his shop for repair than at his rival's, — it gives him a little notoriety, something to talk about. So it is with the liveryman at night; he is, as a rule, only too glad to have the novelty under his roof, and takes pride in showing it to the visiting townsmen. They do not know what to charge, and therefore charge nothing. It is often with difficulty anything can be forced upon them; they are quite averse to accepting gratuities; meanwhile, the farmer, whose horse and cart have taken up far less room and caused far less trouble, pays the fixed charge.

These conditions prevail only in localities where automobiles are seen infrequently. Along the highways where they travel frequently all is quite changed; many a stable will not house them at any price, and those that will, charge goodly sums for the service.

It is one thing to own an automobile, another thing to operate it. It is one thing to sit imposingly at the steering-wheel until something goes wrong, and quite another thing to repair and go on.

There are chauffeurs and chauffeurs, — the latter wear the paraphernalia and are photographed, while the former are working under the machines. You can tell the difference by the goggles. The sham chauffeur sits in front and turns the wheel, the real one sits behind and takes things as they come; the former wears the goggles, the latter finds sufficient protection in the smut on the end of his nose.

There is every excuse for relying helplessly on an expert mechanic if you have no mechanical ingenuity, or are averse to getting dirty and grimy; but that is not automobiling; it is being run about in a huge perambulator.

The real chauffeur knows every moment by the sound and "feel" of his machine exactly what it is doing, the amount of gasoline it is taking, whether the lubrication is perfect, the character and heat of the spark, the condition of almost every screw, nut, and bolt, and he runs his machine accordingly; at the first indication of anything wrong he stops and takes the stitch in time that saves ninety and nine later. The sham chauffeur sits

at the wheel, and in the security of ignorance runs gayly along until his machine is a wreck; he may have hours, days, or even weeks of blind enjoyment, but the end is inevitable, and the repairs costly; then he blames everyone but himself, —blames the maker for not making a machine that may be operated by inexperience forever, blames the men in his stable for what reason he knows not, blames the roads, the country, everything and everybody — but himself.

It is amusing to hear the sham chauffeur talk. When things go well, he does it; when they go wrong, it is the fault of someone else; if he makes a successful run, the mechanic with him is a nonentity; if he breaks down, the mechanic is his only resource. It is more interesting to hear the mechanic—the real chauffeur—talk when he is flat on his back making good the mistakes of his master, but his conversation could not be printed *verbatim et literatim*, — it is explosive and without a muffler.

The man who cannot run his machine a thousand miles without expert assistance should make no pretense to being a chauffeur, for he is not one. The chauffeur may use mechanics whenever he can find them; but if he can't find them, he gets along just as well; and when he does use them it is not for information and advice, but to do just the things he wants done and no more. The skilled enthusiast would not think of letting even an expert from the factory do anything to his machine, unless he stood over him and watched every movement; as soon would a lover of horses permit his hostlers to dope his favorite mount.

## CHAPTER 2

# The Machine Used

### MAKING READY TO START

The machine was just an ordinary twelve hundred dollar single-cylinder American machine, with neither improvements nor attachments to especially strengthen it for a long tour; and it had seen constant service since January without any return to the shop for repairs.

It was rated eight and one-half horsepower; but, as everyone knows, American machines are overrated as a rule, while foreign machines are greatly underrated. A twelve horsepower American machine may mean not more than eight or ten; a twelve horsepower French machine, with its four cylinders, means not less than sixteen.

The foreign manufacturer appreciates the advantage of having it said that his eight horsepower machine will run faster and climb better than the eight horsepower machine of a rival maker; hence the tendency to increase the power without changing the nominal rating. The American manufacturer caters to the demand for machines of high power by advancing the nominal rating quite beyond the power actually developed.

But already things are changing here, and makers show a disposition to rate their machines low, for the sake of astonishing in performance. A man dislikes to admit his machine is rated at forty horsepower and to acknowledge defeat by a machine rated at twenty, when the truth is that each machine is probably about thirty.

The tendency at the present moment is decidedly towards the French type, — two or four cylinders placed in front.

In the construction of racing-cars and high-speed machines for such roads as they have on the other side, we have much to learn from the French, — and we have been slow in learning it. The conceit of the American mechanic amounts often to blind stubbornness, but the ease with which the foreign machines have passed the American in all races on smooth roads has opened the eyes of our builders; the danger just now is that they will go to the other extreme and copy too blindly.

In the hands of experts, the foreign racing-cars are the most perfect road locomotives yet devised; for touring over American roads in the hands of the amateur they are worse than useless; and even experts have great difficulty in running week in and week out without serious breaks and delays. To use a slang phrase, "They will not stand the racket." However "stunning" they look on asphalt and macadam with their low, rakish bodies, resplendent in red and polished brass, on country roads they are very frequently failures. A thirty horsepower foreign machine costing ten or twelve thousand dollars, accompanied by one or more expert mechanics, may make a brilliant showing for a week or so; but when the time is up, the ordinary, cheap, country-looking, American automobile will be found a close second at the finish; not that it is a finer piece of machinery, for it is not; but it has been developed under the adverse conditions prevailing in this country and is built to surmount them. The maker in this country who runs his machine one hundred miles from his factory, would find fewer difficulties between Paris and Berlin.

The temptation is great to purchase a foreign machine on sight; resist the temptation until you have ridden in it over a hundred miles of sandy, clayey, and hilly American roads; you may then defer the purchase indefinitely, unless you expect to carry along a man.

Machine for machine, regardless of price, the comparison is debatable; but price for price, there is no comparison whatsoever; in fact, there is no inexpensive imported machine which compares for a moment with the American product.

A single-cylinder motor possesses a few great advantages to compensate for many disadvantages; it has fewer parts to get out of order, and troubles can be much more quickly located and overcome. Two, three, and four cylinders run with less vibration and are better in every way, except that with every cylinder added the chances of troubles are multiplied, and the difficulty of locating them increased. Each cylinder must have its own lubrication, its ignition, intake, and exhaust mechanisms,—the quartette that is responsible for nine-tenths of the stops.

Beyond eight or ten horsepower the single cylinder is hardly practicable. The kick from the explosion is too violent, the vibration and strain too great, and power is lost in transmission. But up to eight or ten horsepower the single-cylinder motor with a heavy fly-wheel is practicable, runs very smoothly at high speeds, mounts hills and ploughs mud quite successfully. The American ten horsepower single-cylinder motor will go

faster and farther on our roads than most foreign double-cylinder machines of the same horsepower. It will last longer and require less repairs.

The amateur who is not a pretty good mechanic and who wishes to tour without the assistance of an expert will do well to use the single-cylinder motor; he will have trouble enough with that without seeking further complications by the adoption of multiple cylinders.

It is quite practicable to attain speeds of from twenty to thirty miles per hour with a single-cylinder motor, but for bad roads and hilly countries a low gear with a maximum of twenty to twenty-five miles per hour is better. The average for the day will be higher because better speed is maintained through heavy roads and on up grades.

So far as resiliency is concerned, there is no comparison between the French double-tube tire and the heavy American single tube, — the former is far ahead, and is, of course, easily repaired on the road, but it does not seem to stand the severe wear of American roads, and it is very easily punctured. Our highways both in and out of cities are filled with things that cut, and bristle with wire-nails. The heavy American single-tube tire holds out quite well; it gets many deep cuts and takes nails like a pin-cushion, but comparatively few go through. The weight of the tire makes it rather hard riding, very hard, indeed, as compared with a fine Michelin.

There are many devices for carrying luggage, but for getting a good deal into a small compass there is nothing equal to a big Scotch hold-all. It is waterproof to begin with, and holds more than a small steamer-trunk. It can be strapped in or under the machine anywhere. Trunks and hat-boxes may remain with the express companies, always within a few hours' call.

What to wear is something of a problem. In late autumn and winter fur is absolutely essential to comfort. Even at fifteen or twenty miles an hour the wind is penetrating and goes through everything but the closest of fur. For women, fur or leather-lined coats are comfortable even when the weather seems still quite warm.

Leather coats are a great protection against both cold and dust. Unhappily, most people who have no machines of their own, when invited to ride, have nothing fit to wear; they dress too thinly, wear hats that blow off, and they altogether are, and look, quite unhappy — to the great discomfort of those with them. It is not a bad plan to have available one or two good warm coats for the benefit of guests, and always carry waterproof coats and lap-covers. In emergency, thin black oil-cloth, purchasable at any country store, makes a good water-proof covering.

Whoever is running a machine must be prepared for emergencies, for at any moment it may be necessary to get underneath.

The man who is going to master his own machine must expect to get dirty; dust, oil, and grime plentifully distributed,—but dirt is picturesque, even if objectionable. Character is expressed in dirt; the bright and shining school-boy face is devoid of interest, an artificial product, quite unnatural; the smutty street urchin is an actor on life's stage, every daub, spot, and line an essential part of his make-up.

The spic and span may go well with a coach and four, but not with the automobile. Imagine an engineer driving his locomotive in blue coat, yellow waistcoat, and ruffles,—quite as appropriate as a fastidious dress on the automobile.

People are not yet quite accustomed to the grime of automobiling; they tolerate the dust of the golf links, the dirt of base-ball and cricket, the mud of foot-ball, and would ridicule the man who failed to dress appropriately for those games, but the mechanic's blouse or leather coat of automobiling, the gloves saturated with oil—these are comparatively unfamiliar sights; hence men are seen starting off for a hard run in ducks and serges, sacks, cutaways, even frocks, and hats of all styles; give a farmer a silk hat and patent leather boots to wear while threshing, and he would match them.

Every sport has its own appropriate costume, and the costume is not the result of arbitrary choice, but of natural selection; if we hunt, fish, or play any outdoor game, sooner or later we find ourselves dressing like our associates. The tenderfoot may put on his cowboy's suit a little too soon and look and be very uncomfortable, but the costume is essential to success in the long run.

The Russian cap so commonly seen is an affectation,—it catches the wind and is far from comfortable. The best head covering is a closely fitting Scotch cap.