

~~Which Road?~~ *Highways vs. Railroads*

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A hundred years ago we are told there was a memorable race between a horse of iron and a horse of flesh and blood. Very unexpectedly the representative of the old order won the dash from the Relay House on the Patuxent River to Baltimore, twelve miles away.

It was, we can imagine, a glorious day for the stage-coach men whose bottom dollars were laid on old Dobbin to beat the tea-kettle-like contrivance that Peter Cooper had set upon rails to bedevil them. But it was their last celebration; for everything but a broken belt was pulling for Mr. Cooper and his miniature locomotive, Tom Thumb; and it was these newcomers in the transportation derby that took every race thenceforth.

As we look back upon it now we see that race as a great turning point in American transportation history. It is not too much to say - American history. For the greatest need of the country at that moment was its need of means of transportation that would enable people to travel and move goods over long distances quickly and cheaply. That is what the railroad gave it; and the railroad made this country. There is no doubt about that.

By no other means could so vast an expanse of virgin territory have been so quickly settled. Certainly, by no other means would that

settlement and the ensuing economic development have taken precisely the same course.

When the first rails were laid the first regularly established roads were two hundred years old in Virginia, and up and down the Atlantic seaboard there were roads almost as old in the other twelve original States.

It was not entirely the fault of the roads that in the first century and a half after Jamestown there was no settlement West of that narrow fringe of the continent between the Appalachians and the Atlantic. To this result the fact that the Colonies looked backward upon the Mother Country rather than forward to the wild land to their West was perhaps the largest contributing factor. The people, grouped in small hamlets or scattered thinly over the narrow settled area had, for the most part, the simplest of wants, and were almost completely self-sustaining. Their trade - that part of it that overleaped the narrow limits of the neighborhood - was with England rather than with the other Colonies. So there was very little reason for them to travel far from the home hearth, and they did travel very little. There was in the whole length of the Colonies not one road that could lay claim to the title good; but that was not the cause of the sluggish movement of the people, but on the contrary the result of their lack of need.

It is easy to see how these conditions would be changed by the Revolution and the causes leading to it. The common quarrel with

England arose over taxes imposed upon articles of trade. The accustomed trade communications with that country were broken; and more and more the colonies were thrown into commercial relations with each other. Toward the end of the colonial period a considerable intercolonial traffic had begun and this was increased rather than diminished by actual warfare. And then, after the war there was another and stronger reason than any that had previously existed, which strongly demanded for the first time an improvement of the main routes of travel from colony to colony. That was the need of preserving and fostering the rather feeble Union that threatened for a time to fly apart into thirteen more or less isolated parts.

So, in a land in which all roads had been alike, all bad and all local, there arose a new kind of road, improved as to surface with rock or gravel, and traveled by flying stage coaches and freight wagons whose runs were not the few miles of colonial days but the longer distances between the larger cities and the States themselves.

These were the turnpikes. So rapidly did they grow after the Revolution that when Albert Gallatin, Secretary of the Treasury under Jefferson, made his report to Congress on the state of internal improvements in 1808 he was able to say that there were more than 3,000 miles built or building in New York alone, 770 miles completed in Connecticut and hundreds of miles in other States.

We went ahead building turnpikes until well along to the middle of the century; but after that race between Tom Thumb and the coach

horse there was no real question about what was to happen, if any one cared to study the situation.

True enough, there were few who did care to study the situation. To the man in the street of 1830 and to many that sat behind important desks in counting houses, and others who might be expected to study and know the situation, the railroad meant simply a new kind of road and the steam locomotive simply a substitute for Dobbin.

There was violent opposition, of course. The stage-coach men set up a terrific clamor. They would be ruined and the country would be ruined with them, if this thing were allowed to happen. And they had their spokesmen in places of power both in and out of Congress and the legislative halls.

There was even a rather vocal group of citizens, excessively proud of their newly donned democracy, who objected to the new roads on the ground that they were undemocratic, and who protested that common roads were good enough for common people, let the rich ride on railroads if they would.

And then there were those who knew that the excessive speed of the trains - actually 15 miles an hour, think of it - would soon cause all right-thinking people to give up the insane notion. And the smoke! Simply unthinkable that people would submit to it.

As for the friends and promoters of the new roads - they were busy building track and planning and purchasing new equipment. Body

styles in coaches occupied a good bit of attention; and new and better locomotives were produced annually.

In ten years time nearly 3,000 miles of railroad were built, and - interesting reflection, this, upon the manner in which a great economic advance is launched - miles upon miles of it were conceived to render the kind of service which no railroad has ever yet been able to render satisfactorily.

Here was a people in need of a radically new sort of transportation agency, if any people ever was. Here was precisely the kind of transportation agency they needed. And there were many so blind that they could only see in it an affront to their backwoods democracy, and among the more alert, few who could think of any use to put it to other than that for which the common roads were quite adequate.

The usual plan involved the construction of a short line serving a city, to be operated for a distinctly local purpose. Connection even between important cities within a State came only when lines projected from one center entered territory tributary to another, and even then there was often a deliberate effort to defeat what we now know to be the principal mission of the new agency, by laying the tracks on different gauges so as to prevent transfer from one to another.

But there were some men who saw the real meaning of the railroads; some like Benjamin H. Latrobe, one of the greatest of the early railroad engineers, who had seen clearly for many years the difference

between the service for which railroads were fitted and that for which the common roads would suffice. It was such men as these, and the great builders who came after them who made the railroads into the great continent-wide transportation system they became in the space of sixty years.

And, to repeat, it was the railroads that made the country. It was they that so quickly spread a population over a continent. It was they that built cities where log huts had stood short decades before. It was they that built great industries powered with coal fuel the hauling of which was a large part of their job. It was they that made it possible for the great Middle West to devote its fertile soil almost exclusively to production of grain and meat. It was they that made possible that specialization of industry that permitted every section and every city to produce that which it seemed best fitted to produce, the multifarious products later to be spread about in proportion to need everywhere. It was they that, by spreading our people thinly over a vast, virgin, and fabulously fertile area, enabled us quickly to garner marvelous riches.

Certainly, the common roads had nothing to do with these major trends. The turnpikes, deprived of their traffic by superior rails, lost completely their character as main arteries, and becoming once more, in point of usage, purely local lanes, reverted from private corporate ownership to public control at the hands of inefficient local authorities. Again, as in the days of the Colonies, America had but one kind of common road - a bad road.

It was known that the cost of transporting a bushel of wheat nine miles to the railroad in a Middle Western State was as great as the cost of shipping it thence by rail and water to Liverpool. But who wanted a farm nine miles from the railroad anyway? Nobody. And nobody had to take one; because there was plenty of good land much nearer.

For it must be said that this the railroad did also: It developed a great territory, but it did it extensively. It brought New York close to San Francisco; but it left land within fifty miles of each in virtual isolation. Picture the rail system as a great network covering the whole area of the United States, with cities at the intersections and narrow bands of cultivated land bordering each strand, their width limited by the difficulty of reaching the railroad over all but impassable roads, and you have an idea of what the railroad did. In the center of each mesh there was idle, unproductive, isolated land. But the cities, standing at the intersections, grew fat upon what the railroad brought them, and were then fat - congested.

Without aid the railroad could do much; but the more it did to develop the country the nearer it drew the day when it could do no more and when the evils of its good would begin to turn upon it. It could not unaided develop the centers of the meshes, but it could develop intensively the land immediately along its tracks. It could make that narrow band of land more and more valuable until it became too valuable. It could build towns all along its lines so thickly

not that the haul between them instead of being long, as it should be for the efficient operation of the railroad, became short and snorter. It could develop cities until they crowded in upon its tracks so close as seriously to hamper it in its effort to bring into them more and more freight. It did these things too.

At the turn of the century the railroad was nearing its height. The country likewise was approaching the peak of its rail induced prosperity. But, no one can say we are not a favored people! For providentially, it seems, there was already at hand the new agency that would be needed to carry us further. We were approaching another transportation turning point. And, whereas in 1830 it was new facilities for distant movement that we needed, what we needed in 1900 and would soon need badly was better facilities for local movement. Well - there was the gasoline engine and the motor vehicle, and the urge for better roads.

What followed is such recent history that we can pass over it very quickly. There was the same misunderstanding of the character and mission of the new vehicle and its roads as there had been in 1830 of the character and mission of the railroad. A passing fad! Toy of the idle rich! Ship by truck! Ship anything; anywhere! Transcontinental highways! Ho; farm-to-market!

The tar; rails clogged; thousands upon thousands of motor trucks thrown into the breach. They save the day; but the unready roads are ruined! Damn the trucks! Ho, rebuild the roads and rebuild them right.

Finally, out of all the clamor, the emergence of clear principles of highway transportation, and the building of systems of State and Federal-aid highways with a speed and efficiency that surprises the world. A whole people owning motor vehicles.

Far-seeing railroad executives were among the first to see the need for better roads. They were quick to place at the disposal of the Office of Public Roads the "good roads trains" that first carried the message of improved highways into many a community. Far seeing railroad executives today know that the railroads do not now and never have performed a complete transportation service. They know that their freight must come to them over highways and that the only way by which the area tributary to their lines can be increased is by improvement of the highways that feed them. They know, too, that the highway and the motor truck and the motor bus afford them the means of solving many of the problems of congestion, of short-haul, of branch lines, that are insoluble without them. These far-seeing railroad executives look upon their companies as transportation agencies - not as rail carriers bound fast to their rails. They expect to use the highway and the motor vehicle to supplement their rail service.

But not all who speak for the railroads are far-seeing executives. There are those who, seeing the conditions of their business change, can think of nothing better to do than deny the change. The truck is robbing us of our business, they say. (It

carries about 2 per cent of the total ton-mileage of freight, of which the railroads carry 77 per cent.) The motor vehicle is subsidized. It pays nothing for its roads and competes unfairly with us who must build our own tracks. (The motor vehicle pays 52 per cent of the cost of the main roads over which it competes to any degree with the railroads; and 23 per cent of the cost of the local roads which are the necessary feeders of the railroads.) We are unduly restricted by public regulation. Restrict the motor vehicle similarly.

For sample of the kind of regulation of the motor vehicle proposed in the supposed interest of the railroads refer to the recent act of the Texas legislature which limits the load that may be carried upon a commercial motor vehicle to 7,000 pounds unless it is carried to a railroad station in which case 14,000 pounds is permitted.

All of this has a most familiar ring. It is distinctly reminiscent of the cries of the stage-coach men in 1830. But there is far less reason for crying. For all of us will join with the railroad defenders in the answer to the query: "How could the country get along without the railroads?" The answer is "It couldn't." But some of us may be inclined to add: "And just you try to get along without the highways and the motor vehicles and see what happens."

There is no disposition to minimize the seriousness of the problems involved in the necessary readjustment of the railroads to

the new conditions. They have lost much that can never be reclaimed to the private automobile. They will lose more to the truck and the bus. Loss is unavoidable in the adjustments that must take place; but there is gain to be had by the railroads also if they are wisely managed. It is well not to take undue alarm over their present condition. They suffer now from exactly the same causes that embarrass the country and every one of its industries. It is recalled that they enjoyed a very satisfactory prosperity in the years just before the onset of the depression. As the country returns to normal, so will the railroads for they are linked so closely with the country's industry that what benefits the country can not fail to benefit the railroads.

But they can not serve the future of this country alone. Their unaided task is done. The quick, extensive exploitation of the land is over. Henceforth we must follow the path of older nations toward the intensive development of the deeper lying wealth. We have ploughed the center of our field. Now we must begin the job of ploughing around the borders; and that is another kind of job, calling for a rig that will permit the furrow to be turned close to the fence.

The road and the motor vehicles are the new transportation facilities which, joined with the different service of the railroads, will make possible the intensive development that lies ahead.

We have just begun to build roads. Fifteen years ago there

were still a number of States that could not be crossed by highway in comfort. Since then we have made much progress with the main roads. Of these - the State and Federal-aid roads - there were 325,000 miles in 1930 and 226,000 miles were surfaced. But of the 2,640,000 miles of local roads only 467,000 had been surfaced. And of the surfaced mileage - State and local - a very large part was still of pioneer type. For in the improvement of our road system we are following exactly the methods of the railroad builder. The first job has been to get the traffic through. To do that we have built by stages. At first a grade and a light surface; perhaps a narrow one. Admittedly inadequate; but they serve until something better can be added. Just so, the railroad builders laid their first tracks directly upon the soil and left the ballast to be added later. Just so they built at first a single track and let the second wait until the traffic would pay for it.

The road builder's test of the character of the road to be built is: Will the traffic pay for it; and by that he means will the accumulated savings in operating expense accruing to the number of vehicles that will use the road as a result of its improved surface and grades - will that accumulated saving pay and more than pay for the improvement. The roads we are building meet that test.

But we stand now about where the railroads stood in 1880. The main lines are cut through and traffic is moving. There is a big job of new construction ahead on thousands of miles yet unimproved;

there is as big a job of gradual upbuilding of the roads already improved to some degree as the growing traffic requires it. We are not even in sight of the end of original construction; and of course maintenance, and reconstruction - the operating functions - must go on as long as the roads are used.

We are not investing the large sums we are pouring into this newest of the great works of internal improvement simply to provide pleasure roads for motorists. The purpose is much more serious than that, as I have tried to indicate. It is commerce as well as personal travel that we are providing for - a kind of commerce, an intensity of commerce that will not be possible unless we have these roads. It is absolutely necessary that we build for trucks as well as for automobiles; and the roads we are now building are not destroyed by trucks. Be sure that every statement you see or hear to the contrary comes more or less directly from a narrow-visioned defender of the railroads as they have been; and not from one who has any conception of the needs of the future or the actualities of the present. These interests have recently given renewed currency to the story of great damage by trucks. It is a story resurrected from the archives of the war when there was much actual damage of roads by vehicles which they had not been built to withstand.

The story no longer has the merit of truth; but it has been given considerable vitality by much assiduous propagation, and we find that it has won acceptance even by the Federal Courts.

In a recent two-to-one decision upholding a truck regulating law in Kansas the Federal Court is reported to have said that the "highways are being pounded to pieces by these great trucks which, combining weight with speed, are making the problem of maintenance well-nigh insoluble." With due respect to the court, it would encounter great difficulty in finding modern instances to uphold its statement.

A short time before its decision was handed down there appeared in a Tulsa, Oklahoma, newspaper an editorial couched in terms very similar to those used by the court. The editor informed his readers that: "In Arkansas a few days ago it was announced that several of the new concrete roads, built as well as roads can be built, were practically ruined; they have literally been pulverized by heavy trucks."

We were curious about the source of that story which was obviously untrue, so we addressed an inquiry to the State highway engineer of Arkansas. We have his reply which reads as follows:

"This office has been misquoted in saying that it was any of the new roads that have been ruined by heavy trucks. On the occasion of the conference, from which grew the newspaper item, reference was made * * * to some of the old roads that had been built some ten or twelve years, were of a light type and * * * built in a very swampy country on a bad subgrade * * *. I know of no damage to any of our

new high-type roads on the Federal-aid system by reason of heavy truck traffic."

That seems to be a rather complete exposure of the inaccuracy of one of the stories that was specific enough to track down. If the impressions to which expression was given by the Federal Court in the Kansas case were subjected to a like check they no doubt would be found to be equally inexact.

In the same decision, the court is reported to have said that the "public highways have become the roadbeds of great transportation companies which are actively and seriously competing with railroads which provide their own roadbeds." As to the seriousness of the competition one may draw the correct conclusion when possessed of the approximate fact that all motor trucks (the many privately operated to feed to and distribute freight from the railroads as well as the few that may be said in a measure to compete with the railroads) carry 2 per cent of the country's total of freight ton-mileage in comparison with the 77 per cent carried by the railroads.

But there is also the implication in the court's decision that the trucks do not pay adequately for their use of the roads. The trucks do pay and, in some cases, heavily, for their road services. They can, should, and in many cases already do, pay the whole additional cost of main road construction which their superior weight necessitates.

I have referred to the Kansas decision to illustrate how a deliberately fostered campaign of misrepresentation conceived in the

misunderstood interests of the railroads may unconsciously influence important action intended in the broader interest of the public. Such actions were numerous in the early history of the railroads, but they could not affect the general course of railroad development in a country that had so great a need for railroads. No more will they interfere with the general progress toward an adequate system of highway transportation which is just as great a need in the present state of the country as was rail transportation in the last century. But they do temporarily block progress and should be avoided when the facts are so readily available to point the better course.

We have come to our present state of national and economic development by two roads. For two hundred years of our early existence we had only the common road - a mere trail in the seemingly limitless wilderness of a raw country. Then there opened before us a better road - the railroad - by which we have traveled in a hundred years to the limits of that vast territory, spreading over it as we went an extensive culture. Now we have reached the point where we must intensify our development. We no longer look beyond the horizon for our fortune, but in the next field. Long distance and large bulk - the specialties of the railroads - will continue in need in increasing measure; but with them we now have a great multiplication of short distances and small volumes, and for this the common road comes back and on it a new vehicle built to our exact need.

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Henceforth there are two roads - the railroad and the highway.

Both go forward. We must use them both.