# PASSENGERS! THE RAILROADS LOVE YOU-By BOYDEN SPARKES

**TOSTESSES** and trios of Hawaiian guitar players comfort and entertain passengers to Florida. A daily train between Cleveland and Detroit is transformed and its running time shortened; its cars become as lively and alluring as the decks of a transatlantic liner on a week-end cruise; it has a restaurant as smart as any in a first-class hotel, with divans and half-moon tables; kitchen and smells are in another car. Lately a railroad president has been East with the equivalent of a million dollars in each hand to pay for a pair of streamlined Zephyrs of stainless steel that will run fast enough to pull Denver and Chicago nearer by ten hours. Other railroad presidents may be seen in conference with strange hybrids, formed by crossing artists and salesmen, who are called industrial designers. Airconditioned coaches appear in steadily increasing numbers. Some railroads sell rides at one and onehalf cents a mile voluntarily, almost gaily. The railroad stations in New York suddenly become animated forests of skis. The bright colors of scarfs and other woolens make the vast waiting rooms as glamorous as a stage. Then comes another crowdthis time of wistful travelers to an unknown destination, bearing Christmas gifts for they know not whom. Special agents hustle them aboard a train they have named The Lonely Heart. Another regiment of travelers gathers. Each individual has trundled a bicycle, and bicycle grooms in railroad livery tenderly take these wheels aboard a train. Now there comes a crowd in boots and breeches; they have tickets for a dude-ranch train.

discomfort as well: the B. & O. began to air-condition, starting with a dining car. That was in 1930.

When the Century of Progress Exposition began in Chicago, in the summer of 1933, the B. & O. had about 125 air-conditioned cars in operation on the numerous sections of the Capitol Limited, running between New York and Chicago by way of Washington. At the same time on the Chicago run from Southern gateway cities the air-conditioned George Washington, of the Chesapeake & Ohio, was attracting swarms of passengers from its non-air-conditioned rivals. As a consequence of these demonstrations, born of competition, more than 7000 Pullman and passenger coaches have been air-conditioned, at a cost of about \$50,000,000. On Southern railroads white and black passengers in their separate coaches enjoyed their railroad journeys in the summer of 1936 almost as recreation, instead of, as in other summers, as grimy, sweaty, hateful experiences. In the meantime most railroad executives have been convinced that as between speed and comfort the passengers' vote is overwhelmingly in favor of airconditioned comfort. Nevertheless they have to meet speed with speed, and it is when they do that our railroad men make the most dramatic displays of their great skill. As a result of changes growing out of competition of the last five years more than 400 trains, covering in excess of 19,000 miles, are being operated on scheduled runs timed at sixty miles an hour or better. In 1930 there were fewer than thirty such runs, for a total of only 1100 miles. How this has come about is demonstrated by the schedules of three railroads operating between Chicago and Minneapolis. Probably it was the Burlington's decision to operate twin Zephyrs between those cities which prompted the Chicago & North Western to reconstruct standard equipment into the train it calls the 400. It was redecorated, air-conditioned, and in other ways made more comfortable than its predecessors, but its principal offering was speed. It covers eighty-five miles of its journey in seventy-five minutes on a schedule just as fast as the wholly new Zephyrs. So does the silver-red-and-yellow Hiawatha, semilightweight train of the Milwaukee Road. This sort of competition explains the eagerness of some railroad presidents to spend millions for trains entirely new in materials, design and power. on railroad tracks. The Burlington long had been using single gas-engine cars to give more frequent service on its secondary lines. The maker of the rubber-tired cars was the Edward G. Budd Manufacturing Company, of Philadelphia. Ralph Budd and Edward are not kinsmen, and this was their first meeting. The railroad president was not convinced that pneumatic tires were as yet practical for use on the railroads, but Edward Budd, a lifelong worker in metal, set to work to make him see that the metal of those cars was important. Stainless steel, according to Edward Budd, was the answer to the railroads' passenger problems. He had a plan brewing for a complete train of stainless steel; another Western road had been working with him.

#### No More Dirt and Dust

THE railroads have learned that competition, I whether it comes from other railroads, from automobiles, airplanes or busses, is something to be dealt with by being nicer to the customer. This accounts for the fact that railroad passenger equipment is undergoing amazing changes. It is significant, however, that the greatest competitive stimulus is seen to be that which arises from rivalries among the railroads.

When the Pennsylvania Railroad began to spend about \$175,000,000 to electrify its line between New York and Washington, thereby, in addition to other advantages, getting rid of smoke and much dirt, the Baltimore & Ohio started something that now promises to shield all railroad passengers in the United States not alone from smoke and dirt but climatic

## The New Strain of Iron Horses

"TATHEN I got back to Chicago," said Ralph VV Budd, "I told Ed Flynn, our executive vice president, that I had seen a thing that convinced me stainless steel was a means to expand our economical, fast, quick-stopping but uncomfortable little gaselectric cars into full-sized trains. What I had seen was a battleship mast, strong enough to serve a ship of war and yet so light that a couple of strong men could lift one end."

Some months afterward, the manufacturer, Edward Budd, received bad news-the Union Pacific, which had been negotiating with him for a three-car articulated train of stainless steel, to cost \$250,000, decided to give their order for a lightweight train to the Pullman company and their confidence to another metal.

The day after that was announced, Ralph Budd walked into the Philadelphia office of Edward Budd, whose face that day was possibly one inch longer.

"I see you lost your order."

"Yes," said Edward Budd. "They are going to have a train made of a form of aluminum."

"I'll buy a train from you, if you will get it out quickly—as quickly as they get theirs out," said the railroad Budd.

That was July, in 1933. There was one other condition: the new train must have a Diesel engine.

"At the Century of Progress that summer," Ralph Budd will tell you, "General Motors had a great display, a pit where they had an assembly line and manufactured Chevrolet cars. Two Diesel engines were the power plant for all that work. They were being tested. In order to make a real test, those

While in the East in September, 1932, Ralph Budd, president of the Burlington, went to have a look at a gas-electric car made to run on rubber-tired wheels



The "Mercury" Will Work for the New York Central on a Mile:a: Minute Schedule

Where the "Mercury's" Passengers Will Dine Behind Venetian Blinds

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SOIBELMAN SYNDICATE



## THE SATURDAY EVENING POST

engines, after running all day and evening to



the original Zephyr running between Lincoln, Omaha and Kansas City, have been increased to four cars each. Repeatedly, since the enlargement, the seating capacity has been insufficient."

Now, the most important and pertinent fact in this is neither stainless steel nor Diesel power; it is merchandising. What has kept the railroads static for almost twenty years has been the lack of this kind of thinking. A railroad man, when asked why they have not merchandised, will probably remind you that railroad management is something invaded at every turn by Government. Literally, the list of things a railroad president may not do without permission is longer than a list of what he may do.

There are some other reasons why ordinary rules of merchandising are interfered with on railroads.

> Lately, as a crowded Zephyr rolled out of St. Paul on the beginning of a fast six-and-a-half-hour run to Chicago, Ralph Budd, happy as a showman with the S.R.O. sign hanging out, sat in the baggage car. The twin of this train was leaving Chicago; on the Chicago & North Western Railroad, two reconditioned six-car trains were keeping to a schedule just as fast; and on the Chicago, Milwaukee & St. Paul were the seven-car semilightweight Hiawathas.

## **Operating** Costs

VOU rarely see a railroad presi-I dent without a pencil in his hand; and when one figures, he is likely to explore as far to the right of a decimal point as to the left. As might have been expected, Mr. Budd took out his pencil. Near by, another man-a stranger to Mr. Budd-was riding in the baggage car; he wore clean white coveralls as he enjoyed the scenery.

If Mr. Budd wrote down what was in his head, he made a table somewhat in this manner:

Cost of operating a Zephyr train one mile, \$0.3141; cost of operating a standard train of the same capacity, \$0.6955. By items:

	ZEPHYR	STEAM
	TRAINS	TRAINS
Maintenance of power plant or		
locomotive.	\$0.0504	\$0.1830
Maintenance of train	0.0399	0.1020
Cost of fuel oil or coal	0.0139	0.1085
Cost of lubricating oil and		
water	0.0093	0.0140
Wages of crew	0.1735	0.2240
Train supplies and expenses .	0.0271	0.0640

RWOOD & UNDERWOOD

A Streamlined Stainless=Steel Burlington Zephyr. These Silver Streaks Will Make the 1015 Miles Between Chicago and Denver in Record Time. Above - The Latest Design in Pullman Cars, Used on the Union Pacific



KEYSTONE VIEW CO. A New Type of Double Decked Passenger Coach

Zephyr trains—it will have eight before the year is ended; more next year-had completed 1,000,000 miles of operation. The 1,000,000 miles had produced a profit. According to Mr. Budd:

"It may be questioned whether, in the net, we have made much money, but we have made some, and there is more money to be made if we give the service people want. The declining curve of railroad travel that began sixteen years ago, now, on our road, has changed its course and started upward. Travel has increased and is increasing more. The average distance traveled by all people riding the Burlington trains in 1935 was 110 miles. The previous year it was 129 miles. That means we got back a lot of short-haul business. Our loss had been much heavier in local than in through travel. In the old days, 75 per cent of our passenger business was local.

"The Zephyrs have been patronized beyond our expectations. Two of the trains, the Mark Twain between Burlington and St. Louis, and

The item which showed least reduction was crew, and it was apropos that Mr. Budd's secretary should invite his attention to the idle man in coveralls.

"Who did you say?"

"I said he is the Zephyr's fireman."

There was nothing for the fireman to fire; fuel is fed to the mechanism, as on an automobile, by the driver when he uses the throttle. Yet, under union rules, there must be a fireman.

The great significance of lightweight trains of stainless steel is not their purpose, their shape or Diesel power, but their metal and the way that it is fabricated. This is the thought of Edward G. Budd. whose company makes and sells these trains.

When you talk with Mr. Edward Budd he'll say, "We've got much more than just a train of shining railroad cars. We've got a new art that will be a powerful lever in economic rehabilitation.

"Add up in your mind the extra cost of using heavy things, and you will get a sum that reveals just what I mean. First of all, you must remember that most of the work we do on earth is moving things around. As a beginning, think of the ponderous masses moved in the process of getting just one man from his bed to his office in the morning. Against his coffee, toast, orange (Continued on Page 76)

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unnecessary alphabetical armies of political employees there must be added to the staggering aggregate the costs of their unnecessary activities-work that would have been done gladly and for the most part by the benefited communities—all that was necessary to be done, had we held fast to the sane and economical plan of assisting local effort, instead of trying to run everything from Washington. Take, for instance, what would seem a most insignificant matter, almost too trivial for mention—the matter of the issuance of Government checks under this plan. Is it so insignificant? Hundreds of millions of checks have been issued by the Government, and are still being issued. It costs the Government a shade more than twenty-one cents to pay its average obligation by checkthat is, to prepare the check, verify and sign, send it out, pay it upon presentation, follow it through the accounts, determine its correctness and legality, and file it away in safe storage, including the cost of paper, printing, and so on. Multiply this cost by the hundreds of millions of Government checks heretofore and now being issued, and you will find that this one little item is in reality a very substantial amountmany times more, in fact, than was wasted on Quoddy or the Florida ditch, or both, plus other projects of similar character.

negotiated with farmers at a cost of not less than a dollar per contractand in many instances much moreand you will begin to visualize the picture of this type of waste under the Santa Claus plan.

But waste of money-millions and millions of borrowed dollars-was not all that was involved in this plan. The substituting of Federal for local management meant, too, waste of good citizenship. Such a plan breaks down local leadership, destroys local responsibility, turns all eyes on Washington and kills initiative-self-help incentive. It loses the advantage of firsthand knowledge of conditions and those safeguards against waste and mistakes that are present under local responsibility. When these safeguards are gone and the Government is footing the bills, communities are tempted to seek and obtain, through political influence, large grants of money, because they happen to have the pull it takes to get it-money that, in the getting, shatters the patriotism of those obtaining it. It opens the way to those innumerable abuses that each of us are daily observing, of people being assisted who are not in need, but who would rather be on relief than work. The breaking down and wanton waste of the selfrespect and self-reliance of a substantial portion of our citizenship, the enforced injecting of parasitism into the body politic, is a waste and damage we can never measure but will require years to repair. The whole thing has been tragic. Tragic, first, because representative government simply cannot succeed if officials persist in securing election on the promise of a definite program and then in abandoning the program for one going in the opposite direction; and, second, because we have so neglected the duties and responsibilities of self-government as to elect and thereby entrust the affairs of government to a Congress that holds its responsibilities so lightly as to permit such a thing to happen. A President might slip or accept bad advice, and there is just one of him to

go wrong, but the Congress, a group of 531 men and women, never should be persuaded to break faith with the people. Thus the Constitution reposed in the President the duty only to administer the laws, while to the Congress it entrusted the grave responsibility of making the laws.

## A Chance for Housecleaning

This is our country-yours and mine. It is worth dying for, if need be, as thousands have done, and surely it is worth working for-working for to the extent of providing a Congress of such upstanding men and women as will keep their promises, be steadfastly responsive to our expressed will, and protect us from flagrant dissipation of our revenues and from an all-consuming public debt—a Congress that will, in our present threatening condition, put on the brakes in such sane and goodengineering manner as will give at once the encouraging assurance that another wreck can be avoided, and then take up the task of helping us out of the mess into which we have been led. The election on November third next will afford us our first opportunitythe first national election since the real purposes of the New Deal program became clear. It is not just a holiday-a day for golf or fishing-it is the allimportant occasion when we select the men and women who are to represent us in the Congress of the United States. True, the nominations in the states and districts have been made and our selections are thus limited, but there is still time to test the sincerity, honesty and capacity of the nominees. At least, we can retire to private life those who have shown their incapacity, and especially those who helped bring about the surrender of the economy Congress. If our Congresses have been weak, it has been because we have been lazy, indolent, complacent or dollar crazy. But if future Congresses are weak, it will be because we just don't give a cuss.



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## The Waste of Citizenship

These costs do not include those arising from mistakes in mailing, wrong deliveries, duplicate checks, thefts and forgeries-all of which multiply as volume increases-substantially augmenting such costs and in some instances involving not only investigational expense by the Secret Service but total loss of the amounts involved. Add to this waste-a large part of which could have been avoided-the costs of similar extravagances too numerous to mention, such as the thousands of contracts the Agricultural Adjustment Administration has

Editor's Note-This is the second of two articles by Mr. McCarl.

## PASSENGERS! THE RAILROADS LOVE YOU

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twice the tensile strength of mild steel. years after 1929 as in other factories. Its strength endures when it is exposed to terrific heats. It is so ductile that it can be drawn into fine wire or pressed into a deep-drawn, graceful shape. The finial and other ornamental glitter on the Chrysler Building, as well as that shining on the mooring mast and walls of the Empire State Building, is made with thin gauges of this stuff, simply because it is beautiful and will not corrode. For hypodermic needles, falseteeth plates, submarine periscopes, golf clubs and wrist-watch chains, it was finding just a little use when Edward Budd began to finger it and ask, "Where could we effect the greatest saving in the world through lightweight constructions made of this?" First the Budd organization had to find a way to fabricate the material in large shapes. The beginning was an airplane, an amphibian, the first all-steel airplane that was ever made. It is mounted now, as if it were a statue, in front of The Franklin Institute, in Philadelphia. "In our first adventures with this noble metal," said Mr. Budd recently, (Continued on Page 79)

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juice, eggs and bacon there is written some of the cost of shipping and using too heavy instruments of agriculture, along with the cost of the too heavy ships and trains in which the food came to market. The man himself rides in a car or train many times as heavy as it need be, now, for safety.

"Whether he crosses a bridge or passes through a tunnel, you can be sure that all along his way he is paying stiff tolls to weight. The wear and tear inflicted by heavy mechanisms is reflected in everything that we buy. We get it in our tax bills, at our table, everywhere.

"We have been developing swiftly the means of cheaper power. The Diesel engine is one of the finest expressions of that cheapness now, but in the use of lightweight, stronger steel we cut in less than half the power needed for a given task. All heavy mechanisms, it seems to me, have been made obsolete, and in wiping out that obsolescence we should find, for everyone who wants it, an abundance of work."

Lack of work probably was just as much a problem to the Edward G. Budd Manufacturing Company in the

However, Mr. Budd's staff often heard from him this dictum, "A depression is a period in which you have time to think." In 1931 he came out of a spell of thinking with an idea that was focused on a knife blade.

The knife blade was made of stainless steel; it had been brought from Germany eight or nine years before by the experimental genius of the Budd Philadelphia plant, Col. E. J. W. Ragsdale.

This bit of cutlery, which kept its glasslike sheen even when exposed to sea water and organic acids, was important simply because it served to open to the Budd staff the knowledge of new alloys, but especially one in the stainless group that metallurgists call 18 and 8. This is an alloy of low-carbon steel with 18 per cent of chromium and 8 per cent of nickel; it has a score of trade names in this country, but it was first produced in Germany by Krupp. The term "stainless" is a mild exaggeration, but it reflects only one of the virtues of this material. Besides an unparalleled capacity for resisting corrosion, this alloy possesses approximately

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"we discovered that no satisfactory way had been devised for fastening it together. A tailor does not make your coat without some cutting of the cloth, and he cannot make it without thread. Before we could fabricate stainless steel, some new way had to be invented for putting pieces of it together in a lasting union. Rivets? Just because each rivet requires the punching of a hole in your material, it represents a weakness. Spot welding? This has been the handmaiden of the stamping art. We understood it fully. It varies; one spot welder's work in fusing two pieces of metal is not uniform with another's; we could get nowhere trying to use a welding process so uncertain on the work we had in mind. We then had made the dismal discovery that ordinary welding often destroyed the corrosion-resistant properties of 18 and 8. That stopped us for almost two years."

## Stitching Steel With Lightning

"Shot welding was worked out for us by Colonel Ragsdale and his staff. A farmhouse near his home was struck by lightning. One of his young sons showed him how the bolt had melted the copper rod that had conducted it to earth; yet this intense heat had been built up and dissipated so quickly that the adjacent woodwork was not even discolored. Pondering on that, he came to realize that in nature terrific heats are generated and dispelled in the least flash of time. If we could arrange to do that with stainless steel, change a spot to fluid and then cool it before its 18 per cent of chromium, 8 per cent of nickel and 74 per cent of steel had time to separate or disturb the glasslike surface, we would have precisely what we wanted. "At that time I was thinking of arranging for a bell to ring when a weld was wrongly made; since then we have given up the bell and use a light. Wherever one of our men is using one of these machines to stitch our stainless steel with tiny threads of lightning, you may see a light flash whenever a weld is not precisely right. Also you can see the tape on which is written as a curving line the time record of each weld. That shows the exact length of the fraction of a second used to fuse the metal. We have made good welds in one one-thousandth part of a second; in practice we use about one-sixtieth part of a second. Where two pieces are united, what joins them is a tiny invisible ingot of steel which for an instant was molten; this weld is hidden because it cools before it extends to the surfaces. "We had never made a plane of any kind when I authorized the building of this amphibian. We copied an Italian plane. Our all-steel plane was lighter and faster than the wooden thing it copied and, besides, it had places for four riders instead of only two. Some of the sheeting of the hull was no thicker than a calling card, and I do not think that any piece of it had the thickness of blotting paper. We finished that in 1931, and, after being flown around this country, we sent it abroad. Test pilots flew it. They landed it, with the wheels retracted, on its belly, twelve one-thousandths of an inch in thickness. It was dented, of course, but there was never a hint of collapse." That year-1931-Mr. Budd returned from abroad, charged with enthusiasm for putting stainless-steel cars on railroad tracks. Mr. Budd was convinced that trains as safe, or safer, and

much faster, more comfortable and cheaper to operate could be made to weigh less than half as much. At that point he told Colonel Ragsdale to design a train. When Ralph Budd came along, prepared to buy, they had something to show him. Budd the railroad man had ideas of his own; later he sent on to Philadelphia the Burlington's mechanical engineer, E. C. Anderson, to make sure that in building a train for high-speed service the designers would have the counsel of one experienced with equipment in actual service. Ragsdale's engineer assistants were young fellows trained in aircraft, and Ragsdale himself, before he went into the Army, in 1910, had studied shipbuilding in Germany. What they managed to pour into one design was experience in building things to fly, to swim and to run on wheels.

Colonel Ragsdale started with a COPY OF THE SATURDAY EVENING POST. He made numerous sketches wherever he could find white space. When his notions and those of each Mr. Budd had taken form in pencil lines, he went to the factory's pattern shop. There he took up a block of wood and began to hew it into form against the sander. That is a big wheel of sandpaper, revolved by power. After half a dozen tries, Colonel Ragsdale had a prow shaped like a horse's hoof, and those lines have not been altered in any Zephyr train. What he had wished to shape was a train architecture that would express sleekness and speed of airplane and automotive quality. But there was something else to be worked out in this pioneering. Recently Mr. Budd told me, "We had made up our mind to eliminate the use of costly dies in making these trains. In metal stamping, the die is the part that gives its shape to a piece of metal when you stamp it. Dies cost a lot of money. On an automobile line we will be allowed a million dollars or more for the body dies. When you are producing hundreds of thousands of objects, each one shaped like all the others, die costs can be spread thinly. But this is not true of railroad cars."

up so much that it will withstand a compression load of 48,000 pounds.

"Because we have learned how to get along without costly dies, we can pretty well adapt the scheme of mass production to the manufacture of railroad cars."

Those strong and hollow shapes of stainless steel now take their place with bricks, with boards and other elemental things that builders use. The principle has untold applications, and already, at the Budd plant, out of such frameworks they have fashioned boats and parts of boats, a wide variety of railroad cars, truck bodies and other structures. This is why Mr. Budd says that what has been developed is not a train of cars but a manufacturing art.

## Aluminum Trains

Where lightweight passenger trains are concerned, stainless steel has a worthy rival in aluminum. While the Budd Manufacturing Company has been building the half dozen trains of stainless steel that now are in operation on the Burlington, and another for the Boston & Maine Railroad, the Pullman Company has built half a dozen lightweight trains of aluminum alloys which it sold to the Union Pacific Railroad, and another which is in operation on the Illinois Central. In addition there are in operation extreme lightweight trains, Diesel-powered, built by the Goodyear Zeppelin Corporation for the New Haven Road and by the American Car & Foundry Company for the Gulf, Mobile & Northern; also there are in operation on several railroads semi-lightweight trains built of low-carbon-steel alloys. These alloys, marketed under various trade names, have admirers among railroad men who believe them to be more practical for all-around railroad service than any other known materials. There is just one thing certain about passenger-train equipment, and that is that everything that was considered standard as recently as seven years ago is now outmoded, destined for early disappearance from the main lines. As long ago as April, 1932, the passenger fares that now have been prescribed by governmental edict as the highest that may be charged-namely. two cents per mile in coaches and three cents per mile, without surcharge, in Pullmans-were established by the Louisville & Nashville Railroad. steel comes in rolls like tape, no wider but the results were inconclusive. Later, toward the close of 1933, due to intensive competition among the roads, even more sweeping reductions were made, this time by lowering the fare for travel in coaches to one and onehalf cents per mile. This much the railroads have known for years—when the choice is between one railroad and another, the travelers ride the cheapest way. But there are other aspects of this competition, now that automobiles, busses and airplanes are each striving for a bigger cut of what long since has ceased to be simply railroad business. For several years the Atlantic Coast Line Railroad has been experimenting with its finest train, The Florida Special. George James is the road's general passenger agent, and for many years he has arranged for special trains on which successive Presidents have made their journeys between Washington and Florida and other points in the South. What he devised for the Florida Special was a recreation car presided over by a sweet-voiced hostess, one who could play bridge, mah-jongg, tiddlywinks or backgammon. Likewise



## The Making of a Zephyr

"I gave my ideas and the staff set to work. As a result, all we need to make a Zephyr train of cars is an inexpensive set of tools. The bulk of the stainless than your palm, no thicker than a heavy piece of paper. This is pulled through a drawbench, and all the dies required are a few pairs of rollers, that could be packed up in a suitcase. To show how we put strength in this construction, take a cigarette paper; rolled into a cylinder, it ceases to be floppy. In the same way, we bend this tape lengthwise into a shape like U, and then, by a special form of welding, fix along the open side another piece that makes it boxlike. We call that added piece the cover plate. As soon as the member becomes like a box, it is tremendously stiffened. I could show you an airplane rudder made in the Savoia plant in Italy under our license. No one untreated member has strength to resist your bending of it, but when it has been fashioned in that U shape and the open end is covered and these parts are put together in x formation, it gets astonishing strength; a twelveinch section will weigh two pounds or less, but it will stand a compression load of 35,000 pounds. Then, when you add a little more metal by welding in a tiny crosspiece, you bring that strength

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GOLF CHAMPION Say "A COOLING DASH OF AQUA VELVA AFTER EVERY SHAVE MAKES MY FACE FEEL CLEAN AND FRESH ALL DAY !"

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## CLOSES SKIN PORES...FIGHTS OFF PIMPLES, SORE SPOTS-

WARM water and shaving cream open the pores in your skin. Dirt and dust settling in these open pores often start blackheads, sore spots, ingrown hairs. the car carried three Hawaiians with guitars. Of course, during the winter season there are six or seven sections of this train bound in each direction. This came to mean a total of about two dozen cultured hostesses and just as many Hawaiian trios. There was dancing both on the many trains of the Florida Special and in the Atlantic Coast Line offices. Last winter the Florida Special carried a total of about 50,000 passengers.

Of course, neither hostesses nor Hawaiians are presented as answers to the problems of those who travel. Their presence on trains is merely a symptom of the tremendous change that is working in the attitude of railroads toward their passenger business. On the long runs in the West and Southwest where there is competition for the patronage of those who cannot afford to ride in sleeping cars the railroads have begun the practice of lending pillows free of charge. Between Chicago and Los Angeles passengers have access to lunch-counter cars and they may have tray service at their seats, at a cost considerably less than in the regular diners. There are breakfasts for twenty-five cents, luncheons for thirty cents and dinners for thirty-five cents. The railroads have wailed so much about their lost freight business that an impression has been created that passengers, to any railroad, are a numerous and boring species. Well, that isn't true; not any longer. Positively it is not true on the New York Central, which is making a good profit on a passenger business that will gross around \$60,000,000 this year; once upon a time, it had a gross of more than \$110,000,000. So what the New York Central is striving for is something like a \$50,000,000 prize. They have a notion that they can get that business back if they use enough imagination.

was, in the main, for men who still live under the spell of what railroad trains and engines meant to them when they were boys.

"The scheduled Sunday happened to coincide with one of the winter's worst storms, yet we had a crowd of several hundred, including men from the New York Stock Exchange and other officers of mighty corporations without the remotest connection with the railroad. I think the climax of the trip was when we turned that crowd loose in our West Albany shop. They were taken out on the erecting floor, where engines were in every imaginable state of undress. Then they poured out to the running shed. Several big engines were there with steam up and safety valves set. These gleeful visitors climbed all over them. They blew the whistles, rang the bells and pretended they were running wild. I can't tell you where the revenue on that is coming from, but we know that if we show enough enthusiasm along these lines, we will get response.

"Take the city of New York. Here are thousands craving sport who have little money. We ran a ski train up to Gore Mountain in the lower part of the Adirondacks, about 200 miles from New York. and we want to serve that yearning. We are running a bicycle train, and we have a plan worked out for a duderanch trip. When the train reaches its destination, the horses will be there and competent horsemen will be on hand. On the bicycle trip, the plan is to drop the passengers at a given spot and then pick them up some miles beyond. They can bring their own bicycles if they like."

This year the New York Central spent about \$100,000 to carry out the ideas of an industrial designer on a new train, The Mercury, for fast service— 165 miles in 170 minutes—between Cleveland and Detroit. This train above the trucks is quite as astonishing as any Zephyr, although it is a shrewd adaptation of standard railroad equipment to a modern idea. The designer was chosen for the task precisely because he had no preconceived notions of design in railroad trains.

"We wanted fresh intelligence applied to our problem," said Mr. Williamson. "We wanted help from someone who had spent his life outside the railroad business. We wanted to escape from our own fixed ideas and conventions."

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## Imagination in Railroading

In his tower office overlooking Park Avenue sits F. E. Williamson, the president. His horizon is a wide one, within which dwell about 10,000,000 people a great pool of passenger potentiality.

"We are trying all sorts of schemes," Mr. Williamson told me recently. "We are trying to revive the interest and the romance that people used to see in the railroad business. For example, we came

"There were no hotel accommodations, so the farmers up there organized the situation. I suppose that within a radius of six or eight miles every farmhouse sheltered some of the visitors. Each of these boys and girls, as they got off the train, was able to find a bus according to a number on a card. The busses dropped three or four at every farmhouse. It was exciting just to see them in their bright woolen costumes. The farmer families were delighted with these visitors and overfed them with enthusiasm. Our ski trains used to leave around ten or eleven on Friday nights and deliver their passengers at that mountain station in the morning in time for a country breakfast. Since then we have tried it out in other cities, notably in Detroit.

"Here is a scheme that promises to make city life a lot more wholesome. People can go out Friday night and get back Monday morning. All America has become much more conscious of the outdoors in recent years. They want to leave the city over Sunday,

## The Lonely Heart Special

"We have a train quite like a ship. When the engine starts, the whole train moves as a unit, because there is no drawbar slack to be taken up. This is avoided by a device called the locktight coupler. In the train itself there is a diner given over entirely to dining facilities. The kitchen is in an adjoining car. The walls of this train are paneled with wood as beautiful as wood may be, even though its thickness is that of paper. The vestibules are circular; each one a gray-and-blue lobby made bright with vermilion doors. The furniture, the lights and all the other equipment have been made to fit a concept that a train can be as luxurious as a private club, and as comfortable."

Well, that's a new idea for sure. But if you ask why all the railroads have begun to transform themselves this way and make travel on the railroads almost better than life at home, you'll have to find the answer in something said last year aboard The Lonely Heart. This special was run at Christmastime. It was designed to provide a holiday

trip for young people who might otherwise be left lonesome in the

# NEW AMITY Zip-sealed Billfolds

Many men prefer the greater protection the zipper slide-fastener gives currency, valuable papers, etc. Amity dealers offer dozens of styles from which to choose, priced from \$1.00 to \$5.00. All are made of select quality, top grain leather, neatly tailored, and replete with many exclusive Amity features. May also be had with key cases to match, making fine gift ensembles.

• Item illustrated: New Amity "Executive" style, No. 434. Retail \$1.00. Choice of black or brown.

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to realize that boys and girls had grown up without ever having been conscious of the railroads; almost every family has an automobile, and when they think about a trip, they fix their eyes upon the family car. We want to get those youngsters railroad-minded, and that isn't hard to do. At the Hotchkiss School there is a railroad club. We do everything we can to encourage boys like that; we have taken groups of boys from other schools all through the underground labyrinth of transformer and signal stations. We show them the yard operations over on the West Side. "Last winter we ran a Wonder Train. That



city. Christmas dinner was served at a hotel in Pittsfield, Massachusetts. There were entertainers aboard the train, and agents of the roads distributed little Christmas trees, toys and other appropriate things. Some of the passengers had provided their own personal cheer, however, and it was one of these who undertook to reply to two suspicious fellow passengers who were asking each other the question: Why was the railroad taking so much trouble just to operate an excursion train? To answer, a passenger who had brought his Christmas cheer with him rose to his feet and roared: "Passengers! The railroad loves you!"