

be the great network of splendid highways? Even if we ignore the fact that the best hard surface roads are made from a petroleum product, and that other roads are made dustless and smoother by oil.

Let us say that you are highly pleased with the color of your frock or your suit. At one time there were few kings who could afford to wear such hues, because as much dye as you have in a lavender handkerchief would have placed a mortgage on most of their palaces. Now, thanks to a messy, sticky by-product of the petroleum industry, these dyes are yours in thousands of shades and at a very small cost.

"What time is it?" You would be forced to refer to a sun dial if it were not for petroleum. You are depending upon the oil and gas business when you sew, when you cook, when you use the typewriter or calculating machine, when you cure a headache or cold, when you employ beautifiers.

Suppose, now, that you remain unconvinced. You will say, "Yes, that's all very interesting, but, what has that got to do with my going out to the exposition and looking over a lot of machinery I do not know anything about? Surely the oil business will keep on making beneficial discoveries and improving its technique whether I visit the oil show or not."

If this very question had not been asked before the first exposition was held in 1923, and again in 1924, 1925, 1927, 1928 and 1929, we might not be prepared to answer. But, it was speedily discovered that the exposition policy must be expanded to interest not only the oil producer, but also the roustabout, the tool dresser, the contractor, the pipe liner, the tank farm employe, the refinery and natural gasoline plant men, the marketer, the filling station operator, the chemist, the physicist, the welder, and on and on the list extended. You cannot suppose that the exposition met this issue with "a lot of machinery".

That is, unless you lump under the head of machinery such items as mechanical eyes which distinguish colors and differences in shades far more precisely than human eyes; an electrical brain which never makes a mistake; instruments operated by the human voice; scales which measure the weight of a breath; thermometers which the heat from a human body a block away will agitate severely; artificially produced bits of chemical matter which act exactly like living organisms, palpitating, fighting, eating, growing and multiplying, without cease; an electric furnace which will melt steel bars but will not injure the hand placed near the pool of molten metal; an electric coil which

WINS BEAUTY PRIZE



Miss Ruby Phillips, a Frisco daughter of Neosho, Mo., brought an added honor to the Frisco family, when she was adjudged the most beautiful girl in a bathing beauty contest put on by the American Legion post of that city, August 12-13.

There were twenty-six entries in the contest and she was the unanimous choice of the three judges. She is 16 years of age, weighs 110 pounds and is 5 feet 2½ inches tall. The prize was \$25.00 in gold.

Miss Phillips is the daughter of Mr. and Mrs. A. G. Phillips of Neosho. Mr. Phillips has been with the Frisco for fourteen years as a telegrapher and agent and at this time is first trick towerman-telegrapher at Neosho.

W. G. Mullens, agent for Frisco Lines at Neosho, Mo., who is the vice-commander of the Clyde Burdick Post of the American Legion in that city, is delighted that the honor went to a Frisco daughter.

will make gases glow in colors, and so on.

And right here one of the most important points may be brought out. Perhaps you remember that the inventor of the best diving suit now available had never been near a body of water large enough to call for the services of a diver. If you say that you are not scientific or mathematically inclined, you may recall that Einstein, the greatest living mathematician, failed in mathematics in school, and Ehrlich, probably the greatest of chemists who contributed to medicine, was expelled from school because of poor grades in chemistry.

To make a complete survey of the exposition the visitor must walk more

than five miles over concrete sidewalks and floors without retracing his steps. Thousands of tons of heavy concrete, chat and sand have been spread over the entire grounds, and continued firmness to this floor is assured by the addition this year of twenty-four large drain basins and the underground network of 75,000 feet of sewerage lines.

The oil show exhibits range from the tiny and extremely delicate electromagnetic instrument used in estimating the mass of an atom to the steel derricks towering 157 feet from the ground and the cracking stills weighing more than 200,000 pounds. In full operation there will be regular gasoline refineries, natural gasoline manufacturing plants, rotary and cable drilling units of all types, gas compression stations, welding equipment, pipe treating and wrapping machines, to mention just a few items.

The automatic pipe line pumping station recently completed by the American Society of Mechanical Engineers, has aroused the interest of the industry in all parts of the world. This station is located just east of the Marketers and Refiners Building.

The United States Bureau of Mines, Bartlesville Experiment Station, will present an oil field control laboratory which will eliminate long delays when analysis are called for in connection with cementing jobs, mud fluid, gas conditions, emulsions and water conditions. The bureau will also display some of the more important among the 200,000 products of natural gas. This will surprise many who suppose that cooking food is the most important function of gas.

The international aspect of the exposition and congress has been given emphasis by the signing by President Hoover of the joint resolution which authorized the president to invite representatives from fifty-two nations.

The associations connected with the industry, such as the American Petroleum Institute, the American Society of Mechanical Engineers, the American Institute of Mining and Metallurgical Engineers, the American Welding Society, the Petroleum Geologists Association, the Association of State Geologists, the Mid-Continent Oil and Gas Association, the Independent Petroleum Association of America, the Natural Gasoline Manufacturers Association of America, The National Credit Men's Association, petroleum division, the Purchasing Agents Association, the Scouts and Landmen's Association, the National Conservation Service, and numerous others, have perfected their plans for participation in the exposition program.

A NIGHT ON THE ENDURANCE ENGINE

DIEUDONNE COSTE, the French aviator, has just completed a 4,100-mile ocean dash in 37 hours, but he hasn't a thing on me.

I just completed a 201-mile ride on the world's endurance locomotive.

I'm air-minded, but I'm sold on that 4213, and the fascination of the throttle takes precedence over the "stick" in my estimation.

You know it's a rare treat for a girl to ride a locomotive. I fished around for an invitation and finally "Dee" Forsythe, the man in charge of the run, asked me to ride with him.

And may I pause right here to say that of all the dresses and hats and shoes I have bought in my life, I never experienced a thrill like I received when I went into the Army Store to buy a pair of coveralls. The clerk asked me the size. I told him "small", but I could have taken somebody else along inside of the pair he sold me. I turned up the bottom and cut off the sleeves, and put them most carefully into my overnight bag. A pair of old shoes went in, too, a close-fitting tam and a pair of goggles. I forgot the handkerchief that you wear around your neck to keep the cinders out, but somebody loaned me one.

But I'm getting ahead of my story.

I was to catch the engine at Springfield. It was expected in at 10:30 a. m. on the morning of August 29 and when I called the dispatcher's office to find out when it would leave for Kansas City, he seemed to know I was going along and said he would have me called along with the rest of the crew. Gee, I got a real thrill when he said that! He said I'd be given an hour and a half before train time.

After a hasty meal, and a trip to the bakery, where I bought an angel food cake (for the crew), I hurried back to the office where I would be ready for the call.

Frisco Girl Learns About Railroading First Hand— "I'm Crazy About It" She Says

By MARTHA C. MOORE

It came! Somebody's voice said, "Miss Moore, engine 4213 leaves for Kansas City at 2:45—2:45 p. m.!" Whoopee!

I got into those all-enveloping coveralls in the Frisco Building and the photographer met me at the door and

time it was Mr. Frank Reed from the Southern division. I feel pretty sure that that crew had gone to a lot of trouble to make things comfortable for me, for the first thing they handed me was a piece of white canvas to put over the seat. I guess they expected to see me in a white linen dress, but I fooled 'em. I wanted to get dirty. I wanted to get cinders in my hair and grease spots on my coveralls, for I intended to go in for class 1 repairs when I returned, which would include a facial, a shampoo and a hot, steaming bath.

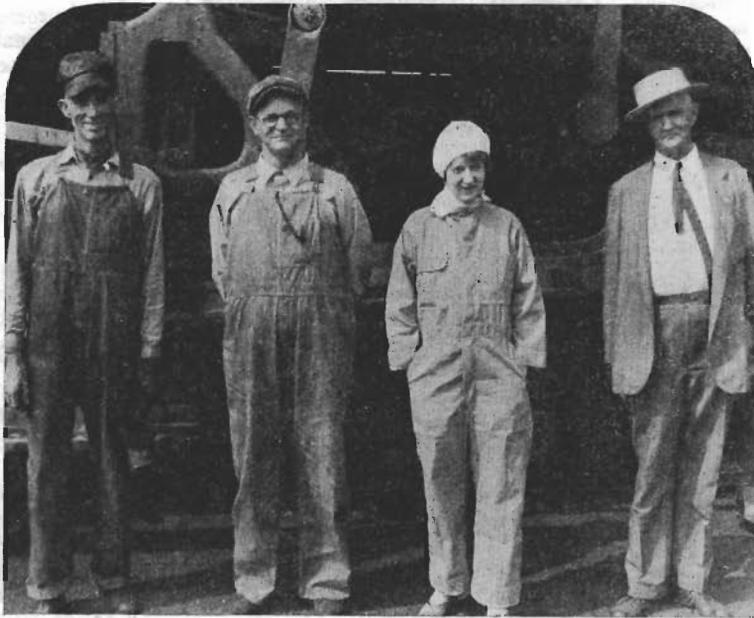
I sat up in the brakeman's cupola while the 4213 coupled onto the train of 59 cars, and away we went.

At Lockwood we had to go in the siding to let the Sunnyland by and I went up to the engine and met all the crew. The Sunnyland shot by and we were on our way again, and this time I was in the engine.

They had fixed a wooden box between the cab and the tender, and on it was a big, soft cushion. There I sat! All eyes! All ears! I watched the engineer pull the throttle a notch wider. I watched the fireman, with his eyes glued most of the time to the steam gauge, for he had to keep her up to 230 pounds. Stations

were passed. The country never looked so beautiful to me as it did from the cab of that locomotive.

There was ice water from a tank right on the cab and I drank from a tin dipper. At this writing, and a week later, I'm just getting over some red spots on my face which came from watching that livid red fire box. The fireman would open those butterfly doors to see if the fire was just right, and I could see almost all of the eighty square feet of grate area. The wonderful part of it all to me was the fact that that fire had been just as I saw it for almost thirty days.



Left to right: Fred Long, fireman; C. J. Kirkpatrick, engineer; Miss Martha Moore, Associate Editor, Frisco Magazine, and D. L. Forsythe, general road foreman of equipment.

we went to the north side, wound in and out among the tracks and found the 4213, coaled, tank full of water, and ready to couple on to the train. We stood beside that big monster and had our pictures taken, and then the brakeman said we'd better get out and "get going," and I said I thought so, too.

I went into the caboose—that famous little red caboose where Mr. Forsythe has lived during two endurance tests which have each time broken the world's record. On each trip he has taken with him a road foreman of equipment, and this

It seemed as if it would have melted the lining.

Every once in a while the fireman would leave his seat and pull the coal down into the conveyor, where, by means of a firing valve and steam jets, it was distributed in the fire box evenly. It wasn't long before I was straddling that gangway and pulling down the coal for him. I guess it would have been work if I had to do it, but I found it great sport.

I rode the engine all the way into Ft. Scott. We got there just at dusk, and I think the crew thought I had had enough and would deadhead back from there. But they didn't know me. I might never get to ride an engine again and I wanted the thrill of some night riding.

So we pulled into the Fort Scott yards and hopped off and went to a little restaurant where we ordered a substantial meal, while our train was being made up. Then up into the yards, where the engine was ready again for the last lap of the journey to Kansas City, with a new crew, and a train of 115 cars.

I rode in the engine as far as Paola, Kans., where we took coal and water, and—cut the cake. Everybody got a piece and it tasted great. At Paola I got back in the cupola and slouched down in the seat. The little front window permitted me to see the track ahead, right through the engineer's window, and what a great time I had.

"Dee" came back and asked me if I didn't want to rest on one of the bunks in the caboose and I told him I could sleep when I died, that the thrill hadn't near worn off and I was good for all night.

And I was.

First "Dee" came back off the engine and sat down in a chair before his charts and figures, and I saw him nodding for many a mile. Then the brakeman came back and sat down in the caboose for a few moments.

But most of the time I was alone, thrilling with the ride—watching the big locomotive pull its 115 cars up those hills. Having been in the cab. I could see, in my mind, that steam gauge registering 230! I could see the engineer, Michael Mullane, leaning out of the cab—I could see the fireman feeding the stoker and pulling the coal down in the hole. There must be no delay to that endurance locomotive—the steam must be up, everything must be just right. That searching headlight blazed the trail and every puff from the exhaust that shot up into the air through the stack made one marvel at the power—and when the booster, which they called the "little man", was cut in, it

HOW TO KEEP FROM GROWING OLD

Always race with locomotives to crossings. Engineers like it. It breaks the monotony of their jobs.

Always pass the car ahead on curves or turns. Don't use your horn, it may unnerve the other fellow and cause him to turn out too far.

Demand half of the road—the middle half. Insist on your rights.

Always speed; it shows people you are a man of pep even though an amateur driver.

Never stop, look and listen at railroad crossings. It conserves time.

Drive confidently, just as if there were not eighteen million other cars in service.

Always lock your brakes when skidding. It makes the job more artistic.

Always pass cars on hills. It shows you have more power; and you can turn out if you meet a car at the top.

seemed that the countryside fairly rocked.

I thought of the old days of rail-roading that those veterans have told me about. I pictured the contrast—the automatic signals—the long trains and the steep grades which would have required a "helper" in the days of long ago.

The brakeman said I slept for a few moments, but I don't believe it. Anyway, he came in after awhile and said we were nearing Kansas City, and it was time to "wash up". I wasn't very dirty, but I wiped the cinders from my eyes and washed my hands and we pulled into the yards at 2:30 a. m. I caught a train back into St. Louis at 3:45 a. m., so there was time to get to the Union Station. I told the Pullman conductor that I probably looked like I had taken part in a holdup, as my coveralls were over my arm, and my bandana handkerchief

PRAISE FROM HOOVER

"I have received from all sections of the drought area high appreciation of the railways for their prompt and constructive action. It is a notable act of courageous co-operation and has been undertaken in the face of seriously reduced income due to the depression. It emphasizes the public interest of maintaining the strength and financial stability of our railways that they shall be able to co-operate in times of national difficulty."

HERBERT HOOVER

On August 19, 1930.

in my hand, but that I had just gotten off the world's endurance locomotive! I had to tell somebody, even at 3:45 in the morning!

And I awoke the next morning at 10:30. Some lady was talking across the aisle and I couldn't help but hear. And here is what I heard:

"A girl—rode the endurance locomotive? My I'd like to see her. Isn't she ever going to get up? I have to get off at the next station."

And the porter said, rather proudly, I thought, "No'm, she never got on heah until 3:45 last night. She's been ridin' it for all night and I ain't gonna get her up 'till I have to."

I opened my eyes and sat up. A glance in the mirror told me I could stand a bath, and yep—there they were. My great big coveralls.

I've gone over that trip, in memory, thousands of times! I got all cleaned up before long, and, except for the coveralls and the dirty handkerchief, you wouldn't know I had ever ridden an engine.

I've folded those coveralls away, grease spots and dirt, cinders and dust, and when the years are mellowed with time, I'll unfold them sometimes and remember the most thrilling ride I ever had, the 4213, and "Dee".

K. C. BALL CLUB WINS PENNANT

The Frisco Lines baseball team of Kansas City has closed a very successful season, winning the pennant in the American division of the Independent-Major League with 12 games won and 3 lost. All the players on this team are employed by the Frisco with the exception of two. They are fast ball players as well as a team of sluggers as will be noted by the batting averages shown below:

Player—	Aver.
Smith .....	.558
W. Vader .....	.467
C. McCready .....	.450
S. Fracul .....	.396
Anderson .....	.364
Finn .....	.347
Frizell .....	.333
Walsh .....	.333
E. Vader .....	.321
M. McCready .....	.306
Abercrombie .....	.302
McWilliams .....	.231
N. Fracul .....	.200
Sachen .....	.173

Starting August 24 there will be a play-off between the leaders of all the divisions of the Lowe-Campbell Leagues for the city championship and the Frisco is in the running, with every Frisco fan pulling for them to win.

LIPTON CUP RACES AT PENSACOLA, FLA.

GRACEFUL racing sloops tacking and speeding about a triangular course, their white sails bellying in the cool breeze that ever skips and dances over the deep blue waters of Pensacola Bay. Crowded spectator boats here, there, everywhere, some following in wake of the race. Coast Guard craft dashing about, keeping the path of the racers clear. Large steamers of several nations making their way to port through the myriad of boats that dot the waters. Frisco docks thronged to capacity with excited onlookers. A wild confusion of banners and pennants, flying everywhere. A bevy of seaplanes droning overhead.

Such was the thrilling, colorful scene off Pensacola last Labor Day morning, the final day of the annual Sir Thomas Lipton Inter-Club Challenge Cup Races. Out there on the Bay, yachts representing Biloxi, Mobile, Houston, Pensacola, St. Petersburg, New Orleans and Sarasota were fighting their ways around the course to determine whether the Pensacola Yacht Club should retain for another year the handsome two-foot-high silver cup which Sir Thomas Lipton donated as a trophy in 1919, or whether it should be carried away by one of the other clubs. The winner was determined by the accumulation of the greatest number of points in a series of four races, the other races having been sailed on the preceding two days. The skipper of the Sarasota sloop managed to get across the finish line ahead of his competitors in this final race and with the points earned in the earlier days of the regatta had a total sufficient to

Sarasota Yacht Club Wins Trophy in Gala Labor Day Event

win the cup, making it necessary for Pensacola and the other clubs to go to Sarasota in 1931 for an opportunity to regain it.

Members of the Pensacola Yacht Club, however, made a remarkable showing in this sailing meet as they have frequently done at past meets, having won outright four years and tied twice in the years that the meets have been held. The race which was won by the yacht of the Pensacola Club on the Sunday afternoon before Labor Day was one of the most exciting of the meet and was witnessed by a large crowd. Pensacola's youngest skipper, Louis Harvey, and a crew composed of Dave and Ray Lou Witherill sailed this race. The Pensacola skipper got his boat over the line in front and in windward position and was never overtaken, increasing his lead on each round of the course which was approximately a mile on a side. On the second lap of the final round, the Sarasota boat which was in sixth place at the start displayed brilliant sailing with the tide coming in strong and beating to a southwest wind jumped to third place and made the final turn less than a length back of the Mobile yacht which was second in this race

These yachts participating in the Lipton Cup Races at Pensacola on Labor Day are headed eastward with all sail set at the start of the final race. Note the steamer in the right background.

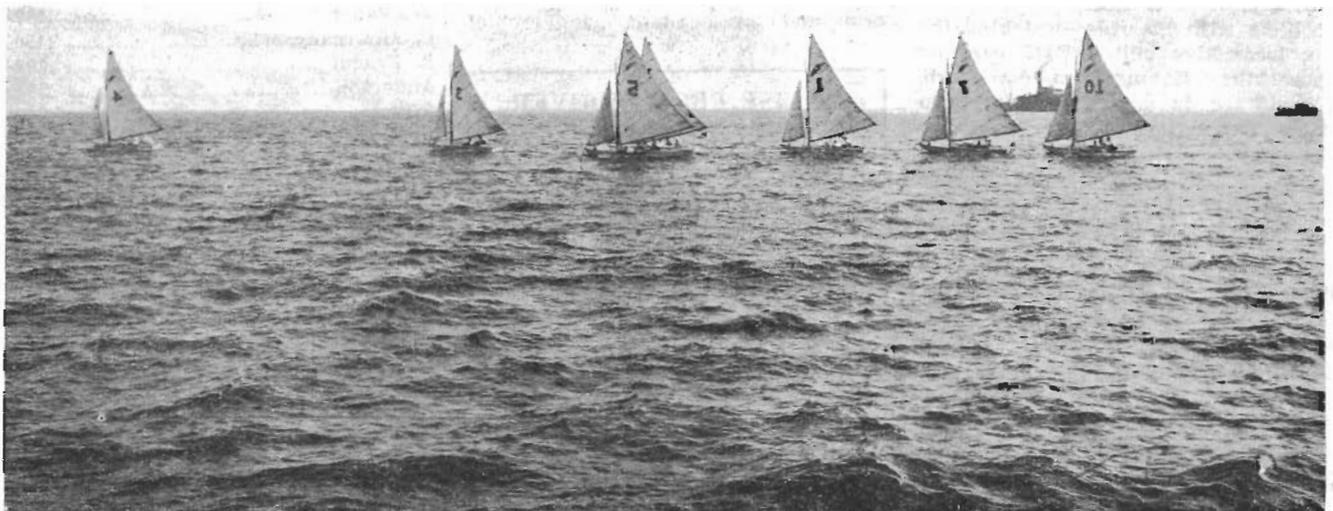
although it was about five minutes back of the skillful crew in the winning sloop from Pensacola.

These regattas have been taking place regularly since 1919, when Sir Thomas Lipton, internationally known patron of yacht racing, gave this sport its first important impetus in the Gulf Coast cities. In that year he informed members of the Southern Yacht Club of New Orleans that he wished to offer a cup for sail boat competition each year and his offer was accepted by this club which invited the Pensacola Yacht Club to join, and the Gulf Yachting Association was formed. The first races were held at New Orleans on the waters of Lake Ponchartrain and proved so popular that other yacht clubs of the Gulf Coast cities were attracted and joined the association so that the regatta for the Sir Thomas Lipton Inter-Club Challenge Trophy is now eagerly awaited by yachting fans each year.

The trophy which Sir Thomas donated is a beautiful example of the modern English silversmith's art and each club upon winning it, has its name engraved upon it and is entitled to retain possession of the cup until it has been duly challenged and won on points by another club of the association. Contests are generally held in the waters of the yacht club defending the cup. Standard sail boat racing rules apply.

Under the regulations now in force, the regatta is sailed in a series of at least four races around Labor Day each year, one race taking place on the preceding Saturday, two races on

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COMPLETES 51 YEARS FRISCO SERVICE

ON October 31, 1930, W. H. Mullens, widely known section foreman at Seneca, Mo., will be placed on the pension roll after having completed 51 years of service for the Frisco railroad. While the records show a break in his service which will give him pension credit for only 37 years and 7 months, nevertheless 51 years ago, or on August 1, 1879, he started his long service as a section hand at Logan, Mo.

A reporter for this Magazine found him after working hours, on the front porch of his home, where he has lived for sixteen years, his former home being the Frisco section house. The fact that he will not have to arise at 5:00 each morning and report for work at 6:00 he has not yet fully realized, and in all these years, Mrs. Mullens told a reporter, he had never once been one minute late to his work.

One may say conscientiously of him, that he has been one of the Frisco's most faithful employes and one of the most unusual of Frisco fathers. Mr. and Mrs. Mullens have reared to manhood and womanhood, four sons and five daughters, and they have thirteen grandchildren.

At one time, Seneca was known as a "Mullens" station. Mr. Mullens served the Frisco as section foreman, his oldest son, W. G., was the agent; W. B., the second oldest, was an operator; Charles was the helper, and Morris, the youngest, was a messenger.

Two of the sons continued in the service of Frisco Lines, W. G. Mullens now serving as agent at Neosho with a service record of 21 years, and W. B. Mullens, agent at Depew, Okla., with a service record of 20 years. The other two sons have entered other work. Charles is now located with an insurance firm at Bristow, Okla., and Morris is with the Oklahoma Contracting Company at Holdenville, Okla.

In the old days the "boomer" was envied, and an operator, switchman, or an engineer would go from one road to another working at short intervals. The Mullens boys all wanted to lead the life of a boomer for awhile, but Mr. Mullens told them that in his estimation it was no credit to be

Section Foreman W. H. Mullens of Seneca, Mo., Retires Oct. 31—Never Had Slow Order On His Section

called a boomer and that the greater credit was to show a record of having remained with one road for a long period of time.

"You can't rear a family and be out on the road all the time and I turned down a position as roadmaster to which I was appointed in 1911 because it would take me away from my family, and I felt that they needed the supervision of a father," he said.

Mr. Mullens says that during his entire service record he has never

automatic train control on my section, which is one of the greatest of the new improvements. Even the flagging is different. We used to set out a red flag at the side of the track, 15 or 20 poles from where the men were working and never left anyone with it. Now we have to leave a man with each flag, with torpedoes.

"Our rail was iron and weighed only 52 pounds and was fastened together with fish plates instead of angle bars. Part of our track was coupled together with what was called chair iron."

Mr. Mullens is a member of the Frisco Veterans' Association and has attended one or two meetings, but it is his intention to attend all of them when his retirement days come.

During the 37 years he has been at Seneca, he has not lost more than four months' time, and has only taken one vacation of two months duration, when he visited a married daughter in California.

While Mr. Mullens was talking of his railroad days, his wife sat in a rocker nearby. She has stood by him all these years, and her task has not been an easy one. In the old days, when accommodations were hard to get, she served meals to the bridge gangs and section forces. She has arisen around 4:30 each morning so that she might get her husband off to work in time, has packed his lunch kit for fifty-one years, and when all her railroad family lived at home, she

packed five lunch kits and got them all off on time each morning.

"It seems that I was cooking meals all the time, for the boys all had different hours," she said. "Mr. Mullens is going to have a hard time adjusting himself to his new life, but I believe I'm going to like it. All the children are married now, and I am glad that we are both in good health so that we can enjoy the years of retirement which Mr. Mullens will receive."

While she is in her sixties, her hair is only slightly grey, and her busy life has not left the imprint of the years of toil. She is particularly happy when she knows that her grandchildren are to pay her a visit.

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Mr. and MRS. W. H. MULLENS

had to report a serious injury of any of his section force, the most serious being a mashed thumb; that there has never been an engine derailment charged to his record, and never, during the time he has been a section foreman, has there ever been a slow order issued because of rough track over his section.

The section which it has been Mr. Mullens' task to keep in first class condition is considered to be one of the best sections on the road. It consists of 5 1/2 miles, four miles of which is straight track with a curve at each end.

"Railroading is different today than it was fifty years ago. We have the