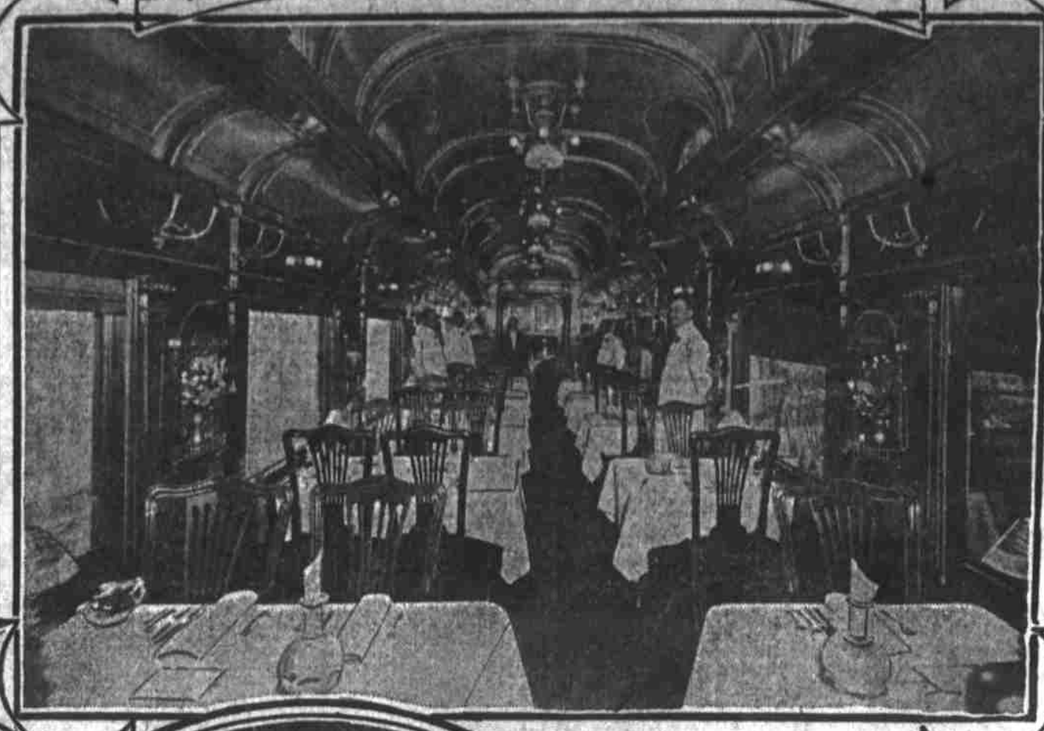
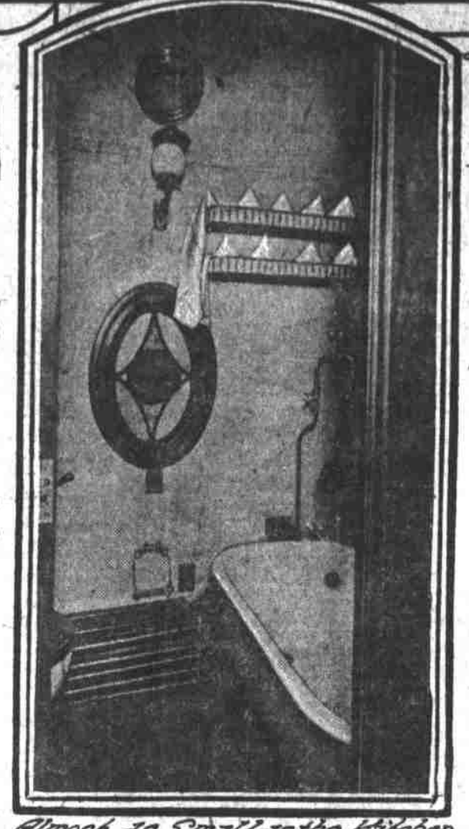
CULINARY MIRACLES of MICROSCOPIC KITCHEN...

Coals at Mark on a Trans-Continental Flyer.....



Just Before the "First Call to The Dining Car!"...



Almost as Small as the Kitchen is the "Flyers" Bath Room...

Preparing Meals for Travelers on Fast Railroad Trains

THE Chicago Limited was sweeping on its swift way, and the florid man was saying to his thin, dyspeptic wife:

"Now, mother, I know I'm going to be hungry; and you won't care for anything. But do let's try to get in on the first call for dinner, so we can take one good meal in peace—alone."

A dapper waiter loomed up beside them like some genie of an Arabian Night, speaking with the Maryland accent submerged under fifteen years of studious eradication:

"Can I take your ordeh for dinneh, suh?"

"Take my order!" gasped the florid man.

"Why, yessuh—resehve yuh places at the table, suh. We do that right along now."

The passenger gazed at his wife with a triumphant gleam in his eye:

"Guess you come along now, mother. It must be some new trick they're handing out of that little bandbox they call the kitchen."

So they, new to the marvel after it had become a commonplace to thousands of more frequent travelers, rejoiced in the newest miracle of that modern conjurer's box, the dining-car kitchen.

BOTH of them were a little incredulous over the waiter's assurance that, at the hour and the minute they selected, upon the table for which the check was given them, whatever they ordered would be served, with no possibility that some one else would slide in ahead of them and take possession for the regular table d'hote service.

The husband, who was more hungry than gastronomic, said he would ask for nothing better than a first-class porterhouse, served fresh from the iron, with potatoes French fried, celery and coffee, with toast that hadn't been dried out, waiting.

His wife thought she could enjoy some clam broth, if it was made freshly from the clams; after that, frog saddles, plain, and only moderately well done, with a little bit of broiled bacon to garnish them.

And she did want—oh, so much—some really crisp, fresh lettuce. Oh, yes, and a cup of tea, not boiled, but with the hot water drawn boiling over the leaves and poured off again, after one minute and ten seconds.

These requirements, modest enough in the sight of any disciple of Apicius, were, nevertheless, precisely those which test the resources both of chef and cuisine. A properly broiled porterhouse, frog meat, with its due color tone, yet with all the juices that make its succulence, even so simple an achievement as toast that is at once crisp and tender—every one of them carries the hallmarks of perfect organization, complete equipment, impeccable skill and high level of original supply.

EXACTLY AS ORDERED

The semi-invalid and her healthy husband, at the time they had chosen, found their seats waiting for them, with no hurry, no anxiety. The service began at the moment when, just on the edge of expectancy, they were ready to eat. And, from clam broth to tea, it came exactly as they ordered it.

"I wonder how they do it?" exclaimed the wife, as they finished the meal.

She was repeating the exclamation of every patron of the modern dining car. Some—favored ones—have enjoyed peeps into the kitchen and have come away still wondering. The results are so great for so microscopic a source that even a New York flat dweller, experienced in juggling one meal in her cubby-hole, cannot conceive an idea of the dexterity that furnishes a hundred from a compartment that is actually smaller than hers.

Sitting at one's table in the diner, with the little epergne of blooming flowers on a level with the eye, the waiter ready yet unobtrusive even in that narrow, table-flanked aisle, the gaze confronts nothing more suggestive of cooking, at the forward end of the car, than a whitely glistening assemblage of silverware on the sideboard that marks the curve of the aisle to the distant door.

Yet you pass out by way of that curve and suspect the existence of nothing but the usual smoking room of a parlor car. But it is in that artfully dissimulated side room that the amazing kitchen is hidden.

Imagine a room as high as the dining-room proper and only eight feet wide by some six yards long. Lengthwise, through the middle of it, runs a path just two feet wide. That path is the kitchen floor. No; there isn't any more kitchen floor lying around in spots, on which one can stand or even find foot room. Just that middle path two feet across.

There, on these thirty-six square feet of floor, four cooks do their work, supplying the requisitions made by the five waiters in the car to satisfy the appetites of as many as forty people at once. As a literal fact, there is barely room enough for those four cooks to turn around.

As for passing one another—well, they never think of such a thing. A dining-car cook, put in his place in the kitchen, simply stays put. His materials, his utensils—everything he can be called upon to handle within his especial sphere of action—must be within his arm's reach. And that is where all of them are.

He reaches, prepares and passes up for service whichever item of an order belongs to his own strictly limited line of work. The chef, who is the hardest-worked cook of any, has his place at the range; the second cook does range duty also. A third is at the steam table. The fourth, who passes out the dishes as they are prepared, is the utility man, whose spare time is occupied with the general scullion work.

Three of the eight feet which the room measures in width—the three feet toward the inside of the car—are taken up thus: At the door is an ice chest four feet wide, reaching up to a height of six feet. Right beside it, twenty-four inches wide, is the broiler, using a bed of charcoal, its upper fire serving for all broiling, its lower heat keeping so high the temperature of the steel bed on which it rests that the bed, as the roof of a lower compartment reaching to the floor, keeps hot the 32-pound roasts that are placed in the compartment after they are cooked.

The range and ovens adjoin the broiler, three feet deep and five feet long. There are, at the bottom, two ovens, each eighteen inches wide and two feet high; so they take in a 32-pound roast as readily as a politician will engulf a bluepoint. The fires here are anthracite, fed from the top, affording the steady, reliable temperature essential for the artistic cooking of a large roast. The whole range surface is available for frying, stewing, and th numberless uses to which the range top is adapted.

Beyond lies the steam table, three feet wide by some six feet long. The reason for the shortening of the steam table, which is that feature of a dining kitchen's furniture that is synonymous with dishes kept warm instead of being served cold, is obvious in cars designed for selection of the meal hour by patrons.

The steam table is at the end of the kitchen nearest the dining room. Across the attenuated aisle or floor is the long sink, a double one, equipped with four faucets, supplying two streams each of hot and cold water.

Next, in a long stretch up to the door, with its back to the outside wall of the car and its front to the aisle, is a copper-topped kitchen table, gleaming ruddily always, no matter how constantly in use for all the varied uses to which the kitchen table is necessarily put.

HARD ON THE ICE

But it is not a table alone. In its front wall, on the aisle, are cupboard doors from ledge to floor, which, opened, reveal deep storage spaces. In the copper-covered table top massive lids lift up, showing hundreds of pounds of cracked ice, in which are buried, ready for instant transfer to broiler, oven or range, the bodies of fowls that appear on the menu.

The cook need not even turn around, on an order for broiled chicken. He need merely swerve his upper body, take out the bird and transfer it to the gridiron.

Those deep ice chests, exposed on one side in the summer to the sun rays that beat upon the car side, and, on the other, to the heat emanating from the ovens and the broiler, have for their only defense the construction of the chests, which is in line with the most recent principles of refrigerator building where ice is the sole dependence.

The great icebox opposite, between doorway and broiler, i. in the same predicament, for its four shelves must do a similar office for vegetables and meats in greater bulk, with free air circulating. It is small wonder, then, that half a ton of ice is the ordinary supply of the dining-car kitchen, and that some days in summer, even on comparatively short runs, bring it close to the margin considered ample for safe preservation.

But these are not all the equipment. The very ceiling is laden with boilers and water tanks, that supply the liquid which is the prime need of every cook, although ordinary conditions of cookery make it as much a matter of course as the air he breathes.

And, by the way, the very air he does breathe in this amazing economy of space is far from being the least difficult thing to supply. Apart from the special ventilation of his box of a kitchen, the top step of the car platform, on which the slender door opens, is floored with copper, like the top of his table.

There are about five square feet in all to this tiny perch beyond the miniature Hades of heat to which the cook is doomed for hours at a time; but it is one of his most treasured prerogatives, at any moment when his hands are not in actual work, to escape to the platform and simply breathe.

On a dining car the conductor is white; the waiters and cooks are colored. The conductor is responsible for the smallest item of silverware and for the last stalk of celery. At the commissary department the most precise inventories, the most jealous records, are kept of his permanent equipment in napery and table service, and of his food supply, perishable and condimental.

The dining-car crews on the Pennsylvania Railroad alone number 430 people, whose efforts feed 70,000 diners a month. And no one dining car, although it is stocked up to satisfy a full hundred appetites, makes so long a run as that from Chicago and New York. The car in which you dined, after quitting Chicago, is replaced at Pittsburg by another, which is as well supplied as was the first.

Those supplies will include any variety of game in season, and food of every temperature, from the arctic of ice cream to, say, the tropic of tabasco. The commissary, or storekeeper, of such a supply point as Pittsburg will issue hundreds of pounds of beef, fowl, fish and bread; grosses of matches, thousands of cigars—all within a single day, as though he were outfitting some big pleasure yacht for a long voyage.

Every dining-car force, as its stores are received, lays them away as expeditiously as the very matches were originally packed in their boxes—and with very nearly as much economy of space.

As every item comes into use on the rushing train it is as perfect as when it was received, thanks to that enormous supply of ice, ever renewed.

And then the diners, after they have been served, rise up with that comfortable feeling which so ingloriously yet so agreeably ties humanity into the rest of the animal kingdom, and remark, with the same calm marveling which tourists accord the Simplon tunnel or the pyramids of Egypt:

"I wonder how they did it."

Makes Fortunes on War in Peace

A NEW YORK business man has made money through the unique occupation of purveyor of war material. He has spent the greater part of his life purchasing arms and equipment at government auction sales and selling them again at a profit.

It is said that his facilities are now so great that in one week he filled an order from Europe to convert a passenger ocean steamship into a fully equipped war vessel for a South American government.

During the war between Russia and Japan he offered the Japanese government from his stores in Europe and America 10,000 McClellan saddles, 100,000 army rifles, 100,000 knapsacks, 100,000 haversacks, 100,000 khaki uniforms, 150,000 gun slings and 20,000,000 cartridges. He will not knowingly fit out a revolution, he insists, and says he once canceled an order of $20,000 placed by a man upon revolution bent.

Looking for Trouble and Finding It.

The Owner Forgot Gasoline For His Engine... Got Town Lights Burning for Electric Light—No Wonder the Cellar Was Flooded.

"CLANG—lang—lang—lang—clang!"

Everybody turns and stares. A fire—an ambulance—the police patrol! Pooh! Nothing so emotional. Only a trouble wagon banging its tearing way down the line to free some miserable trolley car from a fresh predicament or to pull together a wire connection at some important curve.

There, as the police patrol has become the dinging chariot of the law and as the flaming engine has bulked into the clangorous master of fire, the trouble wagon has assumed its place in our civilization as the raucous symbol of a new champion, the trouble hunter.

EVER hear of a melancholy person named Job? Well, he's been reincarnated in the trouble hunter.

His profession, his nights and his days, the breath of his life, are all trouble. And it's double trouble at that—other people's trouble plus his own.

The modern trouble hunter has all of Job's troubles lashed to the mast, and then a few. But, instead of heating up and raising boils over them, he garners them like cherries, when they are ripe, and earns a more or less excellent salary finding them. He is the iron-nerved, case-hardened, copper-riveted epitome of omniscience and urbanity, without which our modern civilization couldn't run five minutes without staying out of order.

Just as the trouble wagon looms before the eye as a sort of chain-lightning trouble chariot along electrical lines, so the electrical trouble hunter undoubtedly is the archetype of all the trouble hunters in the world.

There are more of him, probably, than of any others in his tribe—and for two reasons. One is that, in this generation, electricity goes zigzagging through and around and about us as no other force, except steam, has ever learned to chase itself in Christendom. The other is that no other force has ever developed so many tricks and evasions of the world's laws and orders, except love and the cute little Japanese nation. Hence the trouble hunter's affinity for electricity, and electricity's for the trouble hunter.

But there are more troubles than those of the electricians.

There was a restaurant keeper in New York who proved it. He had a basement the level of which was lower than that of the street sewer. So he needed a pump to heft his sewage to the sewer.

Being thrifty, he was positive he knew a plumber who would instal the pump for less than the manufacturers charged for the service. The pump, delivered on his sidewalk, was duly paid for.

Three days later the manufacturer's telephone exploded, bang! It was the restaurant man, fortissimo. The firm's favorite trouble hunter, who has been for ten years proof to all brands of language, was rushed to the scene of hostilities.

The restaurant man was wading in a subterranean lake, working. The pump was standing pat. The restaurant man consumed large quantities of language, while the trouble hunter consumed time. At last he straightened up.

"Say," he remarked, curiously, "why didn't you remove this blind gasket that comes on the delivery pipe until the pump is set up?"

"What do I know about yer bejiggered gaskets, blind, deaf or dumb? My plumber put in that pump."

"Well"—removing the gasket—"start your pump and go kill your plumber. S'long." And, the blind gasket being removed, the pump worked all right, and the cellar was soon cleared of water.

Then there's the gasoline engine. First came man, then came the gasoline engine; after that came trouble. It isn't the engine's fault. A decent, respectable, gentlemanly gasoline engine will work as steadily as a clock—more steadily than a good many clocks. But you've got to give it some attention. The average owner of a gasoline engine, it is said, thinks it ought to take care of itself.

In New England, some time ago, a leading citizen, going the way of leading citizens, landed a contract to supply his native village with light and power. He invested in a 25-horsepower gasoline engine. He followed its installation with intermittent telegrams of anguish. The firm's trouble hunter arrived during the crisis of the eighth brainstorm.

SOUGHT AND FOUND

He sought and found. The galvanized iron tank, inclosed in a wooden box by the village carpenter, contained no gasoline. "Never heard of a gasoline engine running without any gasoline," he commented, thoughtfully. Then he found the hole in the bottom of the tank, which the carpenter had punched with a nail. The carpenter had pulled out the nail, conscientiously; but, as conscientiously, he had left the hole. So the gasoline in the storage tank leaked out, and it was left for the trouble hunter to find why the engine wouldn't run.

Then there is a story of how a municipal lighting plant came near defeating its advocates at an election. The plant was intended to be in working order some time before the election, but the local engineers who undertook to put the machinery together did not make a success of the job. The engine wouldn't work.

The trouble hunter was sent for. He soon found the source of trouble, and had the plant working on the night before election. Consequence: the municipal officials who had promised city lighting as the keystone of their administration were re-elected.

The trouble hunter is an important factor in every manufacturing enterprise, and in many other enterprises. He is called upon day and night to adjust difficulties. His work is no sinecure, and his reward is often an absence of thanks.