

# Among Men who Work with Hand or Brain

## USE HALF WORLD'S LUMBER IN MAKING PACKING BOXES

By Charles Christodoro

**G**ENERALLY a packing box is looked on as an inconsequential thing, but it is not. If packing boxes were to disappear from this country over night the public would be in an awful plight. You could get no soap, no starch, no smoked meats, no codfish, no coffee, no tea, no eggs, etc., because all these things are transported from the dealer to the retailer and consumer in boxes.

All kinds of wood are used in the manufacture of boxes—white pine, poplar, spruce and cottonwood. The drain on the lumber forests, because of the growth of the country, has been so great that lumber has kept advancing since 1893 with never a setback. Mills, especially the white pine ones, get pay for every scrap of lumber nowadays, and stop short only at the sawdust pile. What a difference! Twenty-five years ago a board with a loose knot in it, but sound otherwise, was apt to be sent to the burner and destroyed. But the boxman can cut out the knot, knots, and shake, and can pay a price, and high one, for them. For years the lumberman has found a sure market for his knotty, shaky, worm-eaten and dozy lumber with the boxman.

### Drain on the Lumber Supply.

It has been estimated that the packing box industry of the United States consumes annually 50 per cent of the entire lumber cut. This means in the aggregate a tremendous amount of lumber and the box industry of the country is, perhaps, one of the largest and most important commercial enterprises.

There are boxes and boxes, as there are boxmakers and boxmakers in every city there are local nailing up shops, where the lumber is manufactured into the complete nailed up box and the same is delivered to the warehouse ready to have the packer fill it with goods. Some of these boxes are nailed together and some are lock-cornered or dovetailed at the four corners.

Tip in the country districts of New England are many box factories that make only small lock cornered boxes from native second growth pine. Some of these boxes are so small as to pack a finger ring ready for the mail. Thousands of young boys and girls earn good wages in these factories, the work being clean and not overtaxing. It takes the deft fingers of a little quickly to handle some of these little boxes. The industry is a large one.

### How the Work Is Done.

The box business in these days of costly and imperfect lumber must be run on highly practical as well as scientific lines. The men must be trained and then carefully watched over. Usually lumber comes to the boxman as inch boards. These are unloaded from the cars and carefully inspected and piled in separate piles in accordance with their defects.

When the lumber is called for by the foreman the yardman loads such boards as may be asked for on trucks and same is hauled to the planing mill and there dropped so that the surfacing machine man can reach them readily. The surfacing machine can be made to plane one or two sides of the board as desired, usually two sides are planed. The operator feeds boards into the machine, which pass under and over rotary knives and come out at the other end smoothly planed, as boards seven-eighths of an inch thick. If thin boxes are to be made these boards are split by a resaw which will give the width of the board or in the smaller sections.

### Waste Ruins Boxmaker.

The board now goes to the cross-cutter, the man who cuts the box to length. He must know his business so well that when he has cut up the board he has cut out only the absolutely worthless parts, and managed so that the last piece cut will leave little waste. Waste is the great bugbear in a box factory, so much so that carelessness

regarding same may ruin a manufacturer. The pieces cut to length are passed on to the operator called a "ripper." The box may need three pieces to make a top or bottom, and the ripper must so handle his stock as to get the last inch out of it.

### Printing on the Boxes.

If the boxes are to be printed they are sent to the printing press and receive the impression from a brass die on a revolving cylinder. Printing is done in one, two, or three colors. If the user desires a tight, snug box the loose pieces are tongued and grooved. If heavy boxes are required it is necessary to fortify the ends by battens or cleats. These are nailed to the ends by means of ingenious nailing machines that feed, drive and clinch the nails. The precision and reliability of these nailing machines is something wonderful.

Manufacturers of stocks have their special lines. Some prefer to work only on heavy boxes and rig up their plants accordingly, and often devise machinery especially suited to the work. Again others will go in for smaller boxes. There are those who make nothing but boxes for canned corn, tomatoes, etc., and others who make boxes only for sheet tin.

### Butter Boxes and Egg Cases.

The butter box is a business by itself, as is the egg case business. You can make two kinds of egg cases, one that is to be used only for quick shipment and the other for cold storage. The former can be made of almost any kind of wood, while the latter must be made of some inodorous wood, like cottonwood or poplar. Eggs in storage will absorb odors, hence the necessity of avoiding a pine box with a resinous odor. Millions of egg cases are used annually and the bulk of them are made from veneered lumber. Cottonwood logs are sawed in two or three foot lengths and are placed in a veneer cutting lathe. The log is made to revolve against a keen knife and as a result a ribbon of lumber leaves the log until it is cut down to the core. This ribbon of wood is chopped to certain sizes and after drying it is cut to the depth. The drying of these veneers without warping always has proved a problem, and as a rule the open air has been relied on. There are veneer-drying machines which are more or less successful.

### Lumber Problem of the Future.

Every year the lumber supply becomes more of a problem—Michigan and Wisconsin are cut out of their white pine and Minnesota has little left. Long ago the lumber barons, with their pine profits in their pockets, went to the Pacific coast and bought millions of feet of fir, spruce pine and spruce. The paper pulp woodmen are going through the forests, cutting a broad pathway. Over 5,000,000 cords of lumber went into pulp wood paper last year. It is said that Harnsworth, the London newspaper publisher, has bought 500,000 acres of standing timber in the north of Canada.

### Makes Clothing From Wool.

And now a man from Saxony invents a process that permits of wool pulp being spun into the equivalent of cotton cloth and linens, most comfortable and satisfactory clothing being made from it. That man is coming to this country to establish an industry. With all these drains on the forests, what will be the future box and out of what will it be made? Commerce demands boxes, and the country will supply boxes, no matter if the forests are gone. A substitute for wool will be found to go into packing boxes.

### Better Pay Than Office Man.

"Look at the quality of the office man who can be got for \$150 a month," said the superintendent of one of the great systems entering California. "Before this company gives a man a desk and chair at \$150 a month in the general office, he's got to show them. There are several hundred cabs to several hundred locomotives in which a \$150 engineer may have a seat with the least questioning when his average fitness has been demonstrated."

Anywhere in any general office of a great railroad one may see men physically and mentally equipped for locomotive engineers of the best grade who, with powerful backs and shoulders, are stooping over desks year after year, at salaries of \$75 to \$85 a month, presumably satisfied to grow old at routine work. The railroad managements see in these fellows the makeup of picked men in the locomotive cab had better be in a mood to consider firing them if they are not doing their duty.

### Fireman's Job Once Was Hard.

Talk with the engineer who has had his train for 15 or 20 years, graduating to it under the old apprenticeship, and he will tell you how uninviting was the work when he undertook it. He had to begin as a hostler in the roundhouse, cleaning engines. They had to be cleaned in those days, too, for in those days every engineer had his own engine and in the eyes of some engineers these pet machines could not be cleaned enough. Through switchyard firing, through the dirty, greasy roundhouse work, and finally to some engine on an indifferent train the fireman worked up through six or seven years of apprenticeship, learning more or less in haphazard way from his engineer and long after the engineer had gone home he toiling in the roundhouse to have the engine in fit condition the next day.

### Green Boy Becomes Manager.

I have in mind the case of a young fellow who entered the employment of a mercantile house as an office boy. He was tall and lanky, and as green as any country boy could be, and he was made the general butt of jokes and careless jests. For the first few weeks he went home every night vowing he would stand the abuse no longer, but in the morning he went back with grim determination to stick it out. This determination was due largely to the encouragement of a single employe of the establishment, who, of all the clerks and workers there was inclined to be friendly and considerate.

### Run and Urnun.

"When I first went to housekeeping I tried to run everything. I ended with running nothing." "Absolutely nothing?" "Well, perhaps the gamut of the emotions now and then."

Maud Adams will be seen this season in an English version of "Les Burfons," a boy part created by Sarah Bernhard.



## ARISTOCRAT OF THE WORKING WORLD--Railroad Engineers Get Unusual Pay, Yet Apprentice Firemen Are Hard to Find

By Jonas Howard

**W**HY doesn't the able bodied young man of mechanical bent turn more often than he does to the fireman's deck of the locomotive?

This is a question which at all times appeals to the superintendents of motive power of the great railroads of the country, and in a few weeks, when the movement of the grain crops of the country begins to test the capacity of the roads and when locomotive engineers are in a sharply increased demand, the question becomes serious to many lines.

Time was under the old rules of the railroads when the work of firing an engine for six or seven years of an apprenticeship made the lot of the fireman hard, dirty, and exacting. Today, under the schooling system that has been adopted almost universally on the big systems, firing still is hard work, but the term of apprenticeship is cut from two to three years, the "hostler's" work is eliminated for the fireman, the shoveling of coal, while increased in tonnage, is made easier by the modern engine, the roads have an income argument behind their question which is inescapable.

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### Must Pass Yearly Examination.

A first year fireman gets his "first year" book. At the end of this first year's apprenticeship he will be called in to Chicago headquarters to pass an examination before an examining board of eight experienced men. The examination requires answers to questions in writing, after which the fireman may have to submit to oral questioning. An average of 80 is required to pass the first year man to his second year's work and second year's book. But if the man has been at all ambitious he has a fair system under which to work. On one of the easy questions he may score only 5 points, but on some difficult question he may have 50 points to his credit. His first year's book is the primer of firing; the third year's book is the high school text on which graduation, with honors, is expected.

And he must graduate! In this obligatory requirement the originators of the fireman's school have themselves forced to the ultimatum. They discovered that not infrequently a second year fireman found himself in a position where, as a fireman, he was earning more money than he might hope to earn in two or three years after he had acquired an engineer's certificate. This fireman would have found himself in a good passenger run, where the terminal suit he had, and with the money, he was earning would be "good enough."

### Graduate or Get Fired.

The road discovered, however, that it couldn't afford to train a fireman merely to a "good enough" job as fireman, and it insisted upon his completing his fireman's knowledge comes in the third year's book in the section dealing with the complete mechanism, sensibilities and use of the modern airbrake system. But the man who has the ambition to learn and the intelligence which must be required of the locomotive engineer is capable of passing always; if he doesn't pass he is dropped as constitutionally incompetent.

Taking the country over the pay of the fireman today ranges from \$50 to \$125 a month, according to his mileage and his proved trustworthiness as he has opportunity to show it. The pay of the engineer is from \$100 to \$200 a month and sometimes even more than this maximum.

Nowadays, with the huge 150 ton locomotives, the operating department of the road determines the load for Bill's engine. The load is on a tonnage basis. Bill has his engine that should accomplish just so much over his particular division. He is given so many tons to haul on schedule time, whether his train be of 20 cars or 10 cars, Bill's decision went.

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### Study the Air Brake System.

In Philadelphia the Reading road has established an equipped school for demonstrating the modern locomotive and

the air brake system, and in classroom study and observation the ambitious fireman may become almost independent of the knowledge which once came to the fireman in long apprenticeship from his engineer.

"Trace the air through the air brake system" is one of the set requirements of the Northwestern board of examiners which twice a year in Chicago summons an average of 200 Northwestern firemen for first, second and third year examinations for the proving of these apprentices. The question may remind one of that old high school exaction of "Trace the circulation of the blood."

To the fireman, however, the air brake question is far more vital in significance than the academic question which was pronounced to him at school. The Chicago and Northwestern railroad was a pioneer in the text book method, and the written and oral examinations of the fireman, who with text book in his pocket and scoop in his hand was required to fit himself for driving an engine.

Every fireman apprentice on this system is a pioneer in the text book requirements of the first, second and third year books. In appearance these books are not at all formidable. One of them may be carried in vest pocket and the wearer of the vest be unconscious of its presence there. But the text of these little booklets is made up of distinctly "reading" questions from preface to finish. Some of the best thought of the operative department of the road has been put into the list of questions, with the object not only to test the duties but also to try out the man himself.

### No Longer Have Pet Locomotives.

Taking the old engineer from his pet engine which he regarded almost as his personal property has spoiled some of the sentiment of the locomotive driver. Nowadays, when he goes to the roundhouse for his engine, he knows only that an engine of a certain class and power will be ready for him. He never may have been in its cab before. It may be poorer or better than any other which he has driven. He knows only that the master mechanic has passed it as competent to do the work with which he is charged and he takes it out as a mere machine which will accomplish that work. The sentiment is lacking wholly. This is illustrated in the speech of one of these old time engineers.

"Sometimes I'm hitting it up along the line when something smashes somewhere. I know what it is by the feel of it. If I can, instead of using the emergency brake, I throw the thing wide open and let her go. In this way I'm not losing any time. When I get in I report the thing broken. Well, where is it? somebody asks. 'It's down the line somewhere,' I say. 'I didn't have time to go back and pick it up.' With an engine that might be his, running only when he was at the throttle, there is strong possibility that this engineer would have the broken part—that he might have risked a little time at a quick repair of the break."

### Shock of Killing a Man.

"Killing a man" is one of the severest shocks that come to the average engineer. "Why does an engineer run a man down?" repeated an old timer. "Simply for the reason that he expects the man to get off the track. If an engineer having seven to ten miles of city crossings to make in getting in and out with his train even slowed down for every person he sees on the track he couldn't make his schedules to save his neck. They don't want whistles blown in Chicago—when a man turns loose with it in a dire emergency somebody is likely to kick about it. I run over crossings every day that have gates on both sides and flagmen stationed between, yet I killed a man just the other day. And it's a shock, I can tell you."

Today in modern railroading the engineer and his fireman get the locomotive at the roundhouse, running it into the train sheds for coupling to the passenger train waiting. When the train is delivered at the train sheds on the return, the engineer and fireman run it back to the roundhouse where the "hostlers" clean it and mechanics look it over, fitting it up for the next run.

Virtually every engineer loafs in service in a modern railroad. An "aristocrat of the laboring world" some one has styled the type.

Governor Patterson of Tennessee has issued a call for a conference of textile manufacturers and labor representatives in all southern states to be held in Nashville in October. It is considered a question of child labor and female labor in shops and factories, with a view of adopting uniform laws that will be agreeable and just to the respective parties in interest.



## PITY THE DOWN AND OUT MAN

By Burt Kennedy

**I**T is a hard thing for a man to be down. It is a hard thing for a man to be broken and lost and to feel that the chances are against his being able to regain his feet.

People there are who say that it is a man's own fault. But these people are either ignorant or without heart. And you are down because of that. No one will look at you. No one will give you work. The police wolves hound you from pillar to post, even though you have suffered punishment for what you have done. And there is no one to help you. And so you are a man who is broken and lost.

But let me tell the people who would cast stones at such a man that the worst crimes against our country are never are pushed. The worst criminals live in the midst of ease and splendor and honor. So think twice before you cast stones at the man who is called a criminal. And remember that the possibilities of crime are in all of us. The man who denies that they are in him either is a hypocrite or a fool.

### Criminal May Be Good Man.

If you are not sorry for the man who has been broken because of a crime he has committed, at least be fair. For he is most likely as good a man as you are. The main thing is that he has been more unfortunate. Do something for him if you can. If you cannot do anything, be good enough not to sneer. I repeat, he is as good a man as you are.

Sometimes it is thought that men who are down are men who are essentially weak. But this is not always so. Circumstance is stronger than the strongest man. You may be a man of power and force and you may be down. You may be a brilliant man and you may be down. Or a man of marked ability. The reason for your being down may be because of a certain nobility in your character. You were not a liar. You were not one who would cringe. And because of this you were pushed aside.

### Learn How to Repair Engine.

That minute knowledge of his locomotive required by the modern examiner thus frequently proves the engine. The locomotive which has made the average 300 mile run a day is ready for the roundhouse and for cleaning and repairs. In the first 10 miles of the run something may get out of order where the intimate knowledge of the engineer will enable him in a few minutes to effect a repair. Without this knowledge the line might be blocked for hours while a new engine is summoned to take its place.

Lacked as the modern engine is to its load and speed capacity, there is little chance for the engineer to make up much lost time. If it be delay owing to a broken something about the engine, he is doing well if he can get his train in without further loss from the schedule.

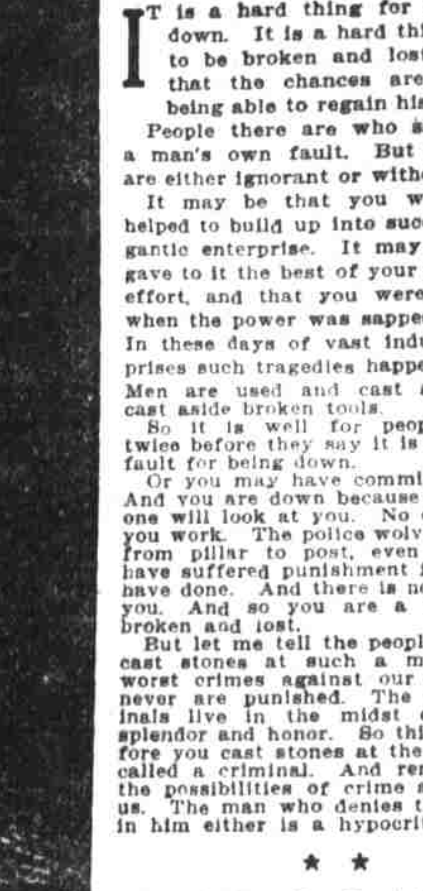
As to the speed of the modern locomotive in fast passenger service, the engineer of the old school has been quite equal to its demands. Some of the oldest engineers in point of service have these fast runs. In the words of one of these men, in answer to a question whether these high speeds shook his nerve, the answer that "the thing sometimes won't go fast enough" is expressive of his attitude.

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## WHO'LL BE BOSS TOMORROW? Perhaps the Man That Works Beside You; Pays to Be Friendly

By Edward M. Woolley

**I**T is good policy for workers to treat their fellow workmen in the light of future bosses. Shifts of fortune often put men in unexpected places, and it pays a man to be on friendly terms with as many persons as possible.

John Smith was a conceited sort of fellow, who believed in speaking his mind freely. "A spade's a spade," he used to say, "and there isn't any use trying to make it anything else." He was arrogant and quarrelsome, and these scarcely was a man in the shop who liked him. He was proud in expressing his own dislikes, and many a man came in for a tongue lashing. Smith, it goes without saying, was a big man physically, or he could not have talked as he did.

One day something went wrong and a dozen men at the factory were laid off. Smith among them. They went to another factory to apply for work. As it happened, the foreman at this place turned out to be a man who had worked under Smith a year or two previous. He had been the subject of frequent ridicule at Smith's hands, and now Smith was placed in the humiliated position of applying for work to his former inferior and enemy. He did not get the place.

### Has Enemies in Every Shop.

In making his rounds in search of employment Smith discovered that a dozen men whom he had known as journeyman mechanics were holding good jobs in various shops, either as superintendents, foremen, or assistant foremen, and in every instance he had incurred their animosity by his sharp tongue and lack of foresight. There wasn't one of them who would give him work.

In the course of time Smith secured a place at a factory in the suburbs of Chicago, where he wasn't known, but it will not be long before he will make frequent enemies to add to his already long list. Each time he gets out of work he

### Misery of the Lonely Man.

It may be that you had a family in the old days when you were on your feet. As you go sadly along you wonder what has become of them. What has become of your son? What happened to your daughter? What happened to them years ago when disgrace and shame fell upon you? When you passed through the prison gate they were not there to see you. You could bear their not being there did you feel that they were getting on all right. You could bear their being too much ashamed to come and see you when you left prison. But the thought that they, too, may be lost and broken is too much for you to bear.

To say that every man has a chance is to say what is not true. There are good, strong, capable men who never have had a chance. You may have talent, and ability, and energy, but if you are born in the wrong set these faculties will never be of any use. A smart, clever lad of the slums may be in danger of becoming a criminal. This same lad if sent to a public school and to the university would turn out in an altogether different way. If his parents were well off his faculties would be given every chance to develop. He would be pushed and helped in every way possible. He would be noticed because of his talent, and he would get on.

### All Bow to Circumstances.

And so it goes. One lad is put right on the way to destruction, the other lad gets every imaginable chance. The proverb that says every man has a chance is the biggest lie that ever has masqueraded as a wise saying. You might as well say that a child who is brought up half starved in a tenement has as good a chance of growing up to be a healthy man as a child who lives in a fine house in the country and who gets all he wants to eat. So when you see the men who are broken down, think a little before you blame them. Do not forget that the same fate might have been your own; in fact, that it may be your own. Circumstance is a big word indeed. It laid even Napoleon by the heels.

### His Poetical Works.

Of Poems styled World Reading I have written one or two. Of poems not worth reading. Some upward of a score. My poems not worth printing would fill columns and columns. So that, if you like them all together, I have written quite a volume.

Be sorry for the men who are down. And if you are so case hardened that you are not sorry for them, at least try to be fair.