

The Practical Inspection of Woodworkers

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Second Installment—Conclusion—Moral Hazard and Adequacy of Rate—Issue of May 19th Contained Physical Inspection of Woodworking Establishments.

The finishing department consists principally of the planing mill driven by steam or electricity. On account of the dry dust hazard, the planing mill, where possible, should be whitewashed with standard fireproof composition and should be inspected for an accumulation of dry dust, shavings and dry refuse. Blower systems should be in efficient working order, and as most of the machinery is of the fast moving type, oily bearings should be rigorously avoided where possible and a liberal quantity of fire barrels and pails distributed for use on the ubiquitous hot box. Oil cans should be supported by tin brackets, readily manufactured from the bottom of standard oil cans. The planing knife grinding room should be kept as clean as possible, and a glance at this department will usually disclose the care with which this unit is kept up by the foreman.

From the planing mill the product goes to the shipping house, which, being adjacent to transportation, should not be built with a combustible roof.

In General: The condition of the mill will be a fair indication both of the efficiency of its owners and of its value as a producing plant. Good carpenters use clean, sharp tools, and the modern, progressive saw mill plant will carry with it an air of cleanliness and prosperity that can be readily recognized.

The electrical hazard in a plant of such ready combustibility should be carefully guarded. Lamps should be enclosed in guards, wiring well spread and carried in protected localities, fuse boxes or cabinets kept closed and with a suitable supply of standard fuses on hand. There is no type of plant in which the practice of substituting a piece of steel or copper wire for a blown fuse is more common, and no plant in which this practice is more fraught with danger.

The bearings throughout the mill will be usually bored and tapped for grease cups, and as these are inexpensive and a money-saver to the mill owner, they should be installed. The wick oiling and ring oiling type of bearings are both economical and efficient, their cost alone explaining their scarcity in the usual mill.

Greasy timbers, for which there is a heavy rate penalty, are extremely hazardous or unimportant according to locality. It is as absurd to penalize the mill for the oily condition of a set of timbers at the outer end of a slow moving conveyor as it would be to ignore the same when located at fast moving, power consuming points. A good method to treat such oily timbers is to coat them heavily with lye, which in the course of a week may be scraped off and a red or yellow coat of car paint applied to the timber. Experience has proven that grease used on a power shaft tends to assume the consistency of ordinary lubricating oil and will eventually cause the same condition of affairs. To prevent the recurrence of this condition, tin shims with upturned edges should be placed beneath the bearings to keep the surface oil from running down the side of the timber.

Owing to the rapid spread of fires in woodworkers, a standpipe, or hydrant and hose, loses most of its efficiency unless the hose is properly coiled with nozzle and hydrant attached. The condition of this hose should be noted and any defective apparatus reported to the mill superintendent.

Water barrels should be kept filled, and equipped with at least two pails, preferably of conical shape. These pails do not prove so irresistible to the domestically inclined employee.

Apart from the efficient watchman's service necessary to a detached manufacturing plant, there should be one or more "clean up" men constantly on duty keeping the mill clear of dust, bark and stray refuse, cleaning oily bearings, etc. The saving in rate effected by a clean and tidy plant will go far toward paying the salaries of such employees.

The renewal date for chemical extinguishers should be noted. A mill hand trying to dampen the ardor of an ambitious blaze with an anaemic extinguisher reminds one forcibly of a wing-clipped hen fighting for an altitude record.

Moral Hazard: Under present day conditions no more difficult problem could be presented to the inspector than the actual determination of the moral condition surrounding a given plant. The records of a commercial rating bureau, while of some value, are impotent to truly measure this hazard. Due to the rapidly changing conditions of the lumber markets of the world, of shipping and railroad facilities, the many phases of each plant will vary from year to year. I know of no industry in this country where the financial condition of ownership of a factory changes more frequently than in the case of the woodworker.

In this regard the writer has found almost invaluable the counsel and advice of the credit men of large machinery corporations. Men occupying such positions keep a close and accurate watch on the lumber markets, and have a broad viewpoint on general con-

ditions surrounding the industry. Judging, as they must, the financial condition of every mill of consequence in their territory, they know more than other men the actual conditions obtaining at the different locations.

These credit men have usually a good working knowledge of the fire insurance policy and with the extensive information available in their department will, if properly handled, impart valuable information to the seeker for the moral hazard of any woodworker with which they are acquainted. An inspector passing on the different qualifications of a considerable volume of this business will do well to cultivate their confidence and friendship.

There is a noticeable tendency for the lumber market of today to flow toward the large and well organized manufacturing plants. Time was when the ignorant head sawyer or shingle weaver without resources could start in the lumber business and build up a fortune. This day is well nigh over. Improved selling and marketing methods and foreign competition have driven the market down to a point where few but the largest corporations owning their own stumpage, supplied with ready shipping facilities, and turning the same into a finished product through the medium of a well organized mill, are able to operate on a profitable basis. After years of hard times we find a majority of the closed-down or inoperative plants have come to the hands of responsible bankers or people of good financial and moral standing. Nevertheless, the hazard of an inoperative plant must always be considered.

The inspector who will thoughtfully apply these ideas to the plant under consideration and who will heed the counsels of people in touch with the many practical phases of this complicated business, should be able to form an accurate judgment of the moral hazard surrounding a given woodworker.

Adequacy of the Rate: While this may tend to encroach upon the privileges of the underwriting department, it is well, nevertheless, for the inspector to form an idea of his own on the ground as to this important point. It is a notable fact in the schedules of woodworking plants in the Northwest that A 1 plants, both as regards construction and ownership, are given the same basis rates as small and inferior plants of unsuitable location.

The tendency toward inferior construction, generally observed in the latter class, operates to bring the rates up to a point which make them look attractive, but after years of practical experience the writer will hazard the remark that in the majority of these small insecure plants the conditions of ownership and manufacture are such as to make it impossible to charge a rate that would be adequate. In the case of the high-grade and efficient plants the placing of a basis rate averaged for all mills has proven burdensome and has resulted in the transfer of such plants in many cases to mutual insurers.

The mutual companies writing mills of this character, sprinkled and unsprinkled, force them as a rule to fulfill three important qualifications, an available and privately owned stumpage sufficient for ten years' operation, an insurable schedule of at least \$75,000, and a detached boiler house and refuse fire. It is useless to ignore the remarkable experience shown by Mutuals writing plants under these conditions at an average rate less than that charged by the Board. The results obtained by such Mutuals show loss ratios ranging, on a widely spread business, of from 44 to 53 per cent. While many of them fail, due to faulty methods of administration or principles of reserve, their loss ratio alone should cause some reflection to the progressive underwriter, for it would seem to bear out the contention that the application of one arbitrary basis rate to all saw mills of whatever construction is fallacious in its inception, and that the preferable method might be the adoption of different basis rates for plants rating, say, in A, B and C divisions.

The rapidly advancing importance of the woodworking industry makes it impossible to ignore the class. The industry will be with us for some time. Under the present system of rating, the fact that the loss ratios of the stock companies writing the best and worst class of woodworkers combined as compared to the loss ratios of the Mutuals, approximate the rate of 80 to 50, may well excuse the inspector in concluding that on the average the rates of the high-grade manufacturing corporations are adequate for the hazard, while those promulgated for the smaller, and I am thankful to say gradually disappearing class, are not sufficient to cover the complicated hazards involved.

J. W. W. Stewart, managing director of the Monarch Life Assurance Company (head office, Winnipeg), was a visitor to British Columbia last week on a trip of inspection. He was greatly pleased with the work of his company in this Province, and was looking for even greater business than last year, when \$977,000 of business was written. Mr. C. A. Crysdale, Rogers Building, Vancouver, is Provincial manager.