

to risk assumed. The following illustrations present the question in a popular light. The plan adopted in a certain class of stores of having all goods in a certain department priced at one figure, although of various values within a narrow limit, may work profitably on a small scale when the goods are of a cheap class, the best being worth only a few cents, but such a system would be utterly impracticable in dealing with more costly goods, which vary largely in value. For example, were an average price of 75 cents per yard fixed for goods in a dry goods store, some of which were worth 50 cents a yard and others \$1 a yard, the sales would soon run so heavily on the dollar a yard articles as to make the business a record of losses. The only plan to carry on any business steadily with advantage is to sell each article proportionately to its cost, so that whatever line of goods is run upon by purchasers the result will be satisfactory. In fire insurance the range in the cost of different risks is exceedingly wide. There are properties that suffer very serious damage by a trifling fire, while others in order to be injured proportionately would have to endure a serious fire. It is certainly contrary to the very fundamental laws of business for an underwriter to charge the same rate for one class of risk as the other. There are also wide variations in the character of risks owing to their different location, though within the same municipal area. The risks in one street differ from those in another street; even on the same street the chances of fire vary considerably. To charge a common rate for fire insurance within any large area, as a city or town, is to ignore these variations in the character of risks arising from their locality or their surroundings. To estimate the exact difference between one risk and another within a given area is a difficult task, as all the conditions affecting the risks cannot be thoroughly known. In fixing rates, averaging must be adopted to some extent, but the companies being desirous of establishing rates on a more scientific basis, a basis more equitable to themselves and to insurers of property, are moving towards a system of specific rating, the results of which, we trust, will be gratifying."

#### EDITORIAL NOTES.

It is reported, with what accuracy we cannot say, that the Canadian Northern Railway Company have restored the rate on lumber coming into Canada from Minnesota to 16 cents a hundred pounds, the probable result of which will be to lessen the quantity of United States lumber which will find a market in Manitoba and the Territories. While an advance in freight rates is not generally in the interest of the country, the present advance seems justifiable from the standpoint of equal rights, as there is no reason why United States lumber should be permitted to come into Canada free of duty, while the same privilege is not accorded to the Canadian product. Let the Dominion Government place a corresponding duty upon American lumber, and our manufacturers will have no fear of competition.

WHERE quality is placed subordinate to cost as a specification for lumber, it has often been the case that yellow pine has been employed in preference to white pine, as by means of the employment of cheap negro labor it has been possible to place yellow pine lumber on the market at a comparatively lower cost. It is of some concern to learn that the negroes of the South are now demanding higher wages, and that where the price for common negro labor a few

years ago was ninety cents a day, it is now \$1.50 a day. The question is proving somewhat perplexing to the southern lumbermen, who fear that if present conditions continue it may mean a loss of a portion of their trade. The demand for higher wages, however, seems only natural as the result of the greater development of the resources of the Southern States.

In a letter to the Department of Trade and Commerce, Mr. James Cummings, special trade commissioner to South Africa, after visiting all the business towns in the Colony of Natal, writes that he finds a general demand for goods that Canada could supply at a profit and better than the present arrangement from Great Britain and the United States. He points out what has been previously mentioned in these columns, that Canadian lumber, doors, furniture etc., is purchased there without the buyer having any knowledge that they are of Canadian manufacture. The mercantile classes of Natal will give the goods from Canada the preference over those from foreign countries, and in view of the wonderful development under way and in sight in South Africa, the business men of Canada should lose no time in endeavoring to secure as much of the trade as is possible.

THE National Lumber Exporters' Association of the United States have undertaken a most difficult task, but one which if brought to a successful issue, is likely to result most advantageously to the lumber shippers of the United States, and eventually to those of Canada. It is to compel steamship companies to issue to exporters a clean bill of lading, or in other words a statement showing the exact quantity of lumber shipped, without the usual limiting clauses such as "more or less," "shipper's load and count," or others of similar import, also to deliver the goods in the same condition as when received. The Association, to accomplish its purpose, caused to be shipped two cars of lumber so prepared and tallied as to render proof of the quantity contained in them an easy matter, and upon their receipt by the steamship company demanded bills of lading setting forth the exact quantity contained in the shipment. This was refused by the steamship company, and suit was begun in the United States Division Court for the Southern District of New York to compel the delivery of such a bill. It is claimed that in the United States the loss resulting to lumbermen through inability to enforce delivery of the amount received, and in equally good condition, amounts to over \$1,000,000 annually, for which loss there has been no redress. The suit will likely be bitterly opposed, but it is hoped that the Association may be successful in its effort, as the existing regulations are most unfair to the shipper. In another column will be found an account of a suit brought to recover damage on account of short delivery of a quantity of lumber shipped from St. John, N.B., to Great Britain.

Some owners of steam plants and some engineers of the same believe that the feed water can not be supplied from the top, nor above the water line. The impression is prevalent that pressure is much greater in the steam space than it is in the water space. This error is very common, even among people otherwise well informed.

#### POINTS ON SAWING LUMBER.

A writer in the Mississippi Valley Lumberman says: "Speaking of sawing inch lumber as an investment, I do not entirely agree with many who seem to think that there is a chance to make a good deal of money even should prices maintain their relative positions. To begin with, it costs at least one-fourth more to saw inch lumber as compared with dimensions. While No. 2 boards and No. 1 dimension are supposed to be made of practically the same quality of stock, yet any one knows, who has had any experience in the saw mill business, that the boards will not hold up in grade as the saw mill will surely open out certain defects which in two inch lumber are covered up. Another factor which very few take into consideration, is that it takes more lumber to manufacture two one inch boards than one two inch board. Inch lumber is supposed to be sawed 15-16 of an inch thick, while two inch dimension is usually sawed 1 and 13-16 inches thick. The saw kerf takes out on an average about 1-8 of an inch for every cut that is made. It will therefore take 3 16 inches more lumber to manufacture two one inch boards than one two inch plank. There is good reason therefore in charging an additional price for the same quality of lumber where it is manufactured in the different thicknesses. In the past some of the lumbermen were in the habit of sawing their dimension practically plump thickness in order that they might re-saw it into boards should the demand make it necessary. That class of people have been very favorably situated the last few months. One manufacturer told me that he had been able to run his dimension through the re-saw for 15 cents per thousand."

#### PRACTICAL NOTES.

With the intention of counteracting the danger of the fire buckets being found empty when needed, either through evaporation or the water having been used for some other purpose and not replenished, the superintendent of a large mill devised the following plan. The hooks from which the buckets hung were fitted up with pieces of spring steel strong enough to lift them when nearly empty, but not sufficiently so to lift them when full. Just over each spring, in such a position as to be out of the way of the handle of the bucket, was set a metal point, connected with a wire from an open circuit electric battery. So long as the buckets were full, their weight, when hung on their hooks, kept the springs down, but, as soon as one was removed, or lost a considerable portion of its contents by evaporation or otherwise, the spring on its hook would rise, come in contact with the metal point, thus close the battery circuit, and ring a bell in the manager's office, at the same time showing on an annunciator where the trouble was. As the bell continued to ring until the weight of the delinquent bucket was restored, it was impossible to disregard the summons, and no further reason was found in that establishment to complain of the condition of the fire buckets.

Cleaning files. A file, to do its work fast and well, should be kept free from its cuttings, says American Manufacturer. Cuttings "pin" when they lodge so finely that they cannot be removed with a brush. Pinning may be obviated by chalking the surface of the file, but this has the effect of reducing its bite. A little oil on the file will frequently reduce the tendency to pin. It should be used, however, only on the fibrous metals, as it glazes the surface of the non-fibrous metals, making them harder to cut. Chalk is usually applied to a file when a smooth, fine work surface is desired. The effect of the chalk is to prevent the teeth from cutting as freely as when it is not used, and thereby produces about the same result as would occur if a finer cut file had been used. When oil has been used on a file it can be readily removed by thoroughly chalking and brushing two or three times, as the chalk soaks up the oil and leaves a dry surface.