

see what are the common variations in house atmospheres. It is generally stated that a normal house atmosphere stands at 66°; but whether this is compatible with agreeable sensations will depend largely upon equable distribution and normal humidity. We may ask ourselves, Why? All bodies lose or gain heat by radiation, by evaporation and conduction. If air have a temperature too low, body heat is radiated too rapidly, in proportion to the number of degrees of difference; evaporation is, however, lessened both from the body and lungs, since the cold air is more damp. Conduction, however, will be more rapid, since the damper the air the better as a conductor. Again, if the air of a room be too dry, evaporation is so rapid as to produce a chilly sensation, and this doubtless, is the reason why in many houses heated with furnaces, hot water or steam a temperature of 66° seems too low for comfort. Practical tests with cold air introduced, warmed, into a room at 67° have shown its relative humidity to be less than 50°.

"Let any one observe the facts in his own rooms," the article continues, "and he will find how true these statements are. Statistics are not necessary for us to appreciate the effects of such conditions upon a population who live at least six months within doors; what we want is to know how to apply the remedy. Clearly, ordinary stoves are in every way objectionable; but, if they must be used in the meantime, it will be well if we urge that the females and young children, so much indoors, do, when not actively engaged, live up stairs as much as possible. The upper floors are warmed from the ceilings below, and outer cold air will come in by the doors of the ground floor and be warmed in its ascent. For the same reason, and especially to prevent draughts, we should have our sick-room upstairs. For purity of air in such rooms an outer sash with opening, with the inner window drawn down, will greatly facilitate its own distribution. Regarding moisture, evaporating pans placed on the stove are clearly a necessity. But in this age, with the marvellous application of scientific discoveries to the practical business of life, we cannot expect so crude a thing as a stove to be long the solution of the problem. What we need, after a good economical heater, is warm air of proper moisture regularly and sufficiently introduced into rooms, and as systematically extracted, along the outer walls and floors, with hollow spaces in which warmed air will at once remove in large measure the difficulties of variable room temperatures, caused from radiation and conducting away of heat by outer walls."

The subject, as will be observed, is by no means exhausted. Much improvement has been made in this country and the United States of late years in the methods of heating. It is probably true, also, that the long-prevailing error of over-heating hotels, railway trains and dwellings, so obnoxious to people brought up abroad has been, in America, corrected in a large degree. Still the householder, and shall we say the average builder, has much to learn upon a subject so essential to comfort and

to health. We rejoice, therefore, to see that the thought of medical men is being directed to the solution of the problem of scientific house-warming. *Medical Science* is to be congratulated upon the effort to attract attention to so important a matter.

SOME DRY GOODS CONSIDERATIONS.

While the present time of the year is usually not a very active one amongst wholesale dry goods dealers, there is a moderate movement going on and there are some features of the market which deserve a passing notice. Complaint was heard here and there during October with respect to lessened volume of trade and backward payments. We have some reason to think that such complaints were not generally well founded. For instance, a dry goods importer in Western Ontario gives it as his experience, and his statement is confirmed by more than one Toronto house, that leading retailers at prominent towns in the province found their business this season quite as good as last year, or better. Payments by such retailers are satisfactory enough: Here are the replies of three wholesale firms to enquiries on this point. No. 1. "We have found remittances in October last better than in the same month of 1886." No. 2. Payments with us last month were better than in October previous." No. 3. "This was the best October we ever had, in the matter of payments." Hence, if some houses were badly paid, the fact may suggest to them that they have not the right class of customers.

It is to be borne in mind, however, that payments by retailers in country districts were often necessarily backward because the farmers, not having sold their grain, or else having but a small yield to sell, "felt too poor" to pay their overdue store bills. There are too many country store-keepers, weak in capital, easy-going as to giving credit, who when a farmer or a mechanic demurs to paying his long standing account, appear willing to risk being sued and driven into insolvency, rather than make a vigorous effort to collect from those who owe them. To such men, a little healthy abuse or threatening might prove a sufficient spur to induce an energetic effort to collect.

In woollens, we find reason to conclude that the tone of the Canadian market is more healthy now than in some former seasons. This notwithstanding the complaints mentioned by our Montreal correspondent last week as to cutting prices in flannels. It is at all events true that we hear of no "slaughtering" of knitted underwear by the hundred dozen, as we did in previous seasons of over-production. The stringency in money may prove to be not an unmixed evil. It may, on the contrary, prove a blessing in disguise, if it make buyers more careful—nay, it has done so—producers more conservative.

There is more stability in values of goods than for several years. "Prices have reached a point," says one buyer, "where manufacturers cannot produce the goods lower, and live." No combination in knitted goods could be maintained, it has been found. But the makers restricted their output, and now there is a healthy demand for all they turn out.

A Montreal importer of long experience refers to a vital point in the economy of retail shop-keepers, when he says they do not as a rule of late years get profit enough. It is a simple thing for any retailer to find out what his necessary expenses are, and then make a

calculation to see if his profits cover them. But there are mighty few who do it. If a man sells \$10,000 worth of goods in a year at an average advance of 20 per cent., and gets paid for the whole of them, his profits amount to say \$1,666. If, therefore, his family and business expenses are \$2,000, the man is clearly losing \$333 a year. Unless the business be done for cash, however, 20 per cent. profit is hardly sufficient for a retail country business. Some foolish people, we fear, do not even get 20 per cent advance, and they give credit freely, too. The result is not hard to foresee.

RECENT LEGAL DECISIONS.

BECKETT V. GRAND TRUNK RAILWAY.—The Grand Trunk Railway Company were sued for damages for causing the death of the plaintiff's husband by negligence of their servants. It was proved that defendants' train ran through the town of Strathroy at the rate of over thirty miles an hour and that no bell was rung or whistle sounded until a few seconds before the accident. The defence proved that the deceased was driving slowly across the track with his head down and did not look up to see if train was coming till shouted to by some persons, when he whipped up his horses and tried to cross track and was killed. As against this it was shown that there was a curve in the road to prevent the train being seen and that the buildings at the station would obstruct the view. The jury found that there was no contributory negligence and awarded damages against the company. This finding was upheld by the Supreme Court of Canada. The life of the deceased was insured and at the trial the judge deducted from the amount of damages assessed by the jury the amount for which the life of the deceased was insured. The Divisional Court on appeal, the Court of Appeal, and the Supreme Court all agreed in overruling this deduction and directed the verdict to stand for the full amount found by the jury.

MATTHEWS VS. THE HAMILTON POWDER COMPANY.—A case arising prior to the Workman's Compensation Act, 1886. The general rule of law unaffected by the statute is that the master is not liable to the servant for the negligence of a fellow servant, even although he be manager of the concern. Here an action for damages was brought by the administratrix of Matthews, an employee of the defendant company, who was killed by an explosion of the defendants' powder mills, caused by a portion of the machinery being out of repair. It was shown that W., a director of the company, had sometime prior to the explosion, when the works were idle given directions to the superintendent and head of the works, to have the defective portions of the machinery repaired before recommencing operations, but he neglected to attend to these and the repairs were not made. It was not shown that W. in any way assumed to direct the practical working of the mills or that he had any special knowledge or ability to do so, and there was no suggestion that the superintendent was an incompetent or improper person to employ. Held by the Court of Appeal that the intervention of W. did not take the case out of the general rule of law, and that the defendants were not responsible for an accident due to the negligence of a fellow servant, as the superintendent was, of Matthews.

COX VS. HAMILTON SEWER PIPE COMPANY.—An action for damages under the Workmen's