

HOUSE HEATING FACTS

Here is a point worth knowing about heating houses. With the ordinary heating systems the tendency is to dry the air in the house. The normal out-door air contains from 65 per cent. to 75 per cent. of moisture. Pass this thru a hot-air furnace and by the time it reaches the living or sleeping rooms it will contain no more than from 40 to 50 per cent. of moisture. The result is that this dried out air attempts to get back to normal saturation. That is it tries to get hold of and take up moisture. Any surrounding bodies which contain moisture in any shape or form are drawn on. Thus the human skin, the mucus membrane of the mouth, nose and throat gets drawn on by the dry air and this fact is in a large measure responsible for the dry, hacking laryngeal coughs so prevalent in winter.

But this moisture craving tendency is not only productive of throat troubles, it is also harmful from an economic standpoint. This method of heating without moisture is very extravagant. Very dry air requires a higher temperature to produce the same sensation of warmth and comfort than does an atmosphere having a proper percentage of moisture. "Conservation of Life" has the following to say concerning the moisture content of air:

"To overcome this dryness, small reservoirs for heating water have been attached to the furnaces; but these are rarely kept full, and even when they are, they are not at all adequate; for instance, air at 25 degrees Fahrenheit (7 degrees of frost), even if saturated with moisture, if heated to 70 degrees, would require the addition of a half pint of water to every 1,000 cubic feet to give it a humidity or moisture of 65 per cent., which is practically normal.

"Some conception of the amount of moisture required, and how far the air in our homes, schools and factories falls short of it, can be had from the following description of the precautions taken by the American Bell Telephone Company in their chief building in Boston, which has a capacity of 450,000 cubic feet and a day population of 450 persons.

"The fresh air, which is distributed by a mechanical system, is drawn into the building at the rate of 26,000 cubic feet per minute, and has moisture added so as to contain about 50 per cent. of relative humidity. To secure this condition, 675 gallons of water, in the form of steam, are mixed with the air, in ten hours, or about one and one-half barrels per hour. Certain parts of the building which had been heated with difficulty before are now made more comfortable; and in the whole building three degrees less heat is required to maintain a comfortable temperature. There has been a noticeable absence of coughs during the winter among the employees.

Keep Room Air Moist

"Various humidifiers have been suggested, of which a very efficient and simple one is the exposing of the air from a register or radiator to moisture, by having it pass thru a surface of cotton wick—one end of which is submerged in a reservoir or vessel, containing water, and which is attached to the radiator. It has been demonstrated that by means of this contrivance the relative humidity of a room can be kept between 55 and 60 degrees Fahrenheit by evaporating about four and a half quarts per day; and a temperature of 65 degrees so maintained is as comfortable as one of 70 in a dry atmosphere.

"A practical illustration of this is the fact that we can sit and read in comfort on our verandas during the fall, in a temperature of from 60 to 65 degrees, having a normal humidity; while the same temperature in our homes, with a dry atmosphere, would be very uncomfortable, owing to the more rapid evaporation of moisture from the surface of our bodies in the drier atmosphere."

The point is, then, that less heat, consequently less fuel, will be required to keep the house comfortable providing sufficient moisture is supplied to the air in the rooms. With a little extra trouble this may easily be attended to; even a shallow pan kept filled with water on the radiator or over part of the register will go a long way towards restoring the heated room air to its proper moisture content.

Canada, Mexico and southern states which never before shipped livestock to Chicago, have been sending their cattle there, and receiving a good price.

A Heart to Heart Chat

In this issue of The Guide we have published a number of the best pictures of the war that are available, showing not only the battlefields covered with torn and lifeless bodies, but also pictures of the various weapons of destruction and the armies which are taking part in the struggle. Stories can be told by pictures more graphically than in any other way, and we believe that our readers will be interested in these pictures in this issue.

This great war is making tremendous changes in conditions in every country in the world. Canada is far removed from the scene of the struggle, and yet the effect is felt in every corner of this wide Dominion. Even among the Indians in the Arctic regions the effect of the war is severely felt. The demand for furs has been greatly reduced owing to the closing of the European market. The harvest of the Indian is, therefore, of greatly reduced value, and they are suffering in that far-away land because the nations of Europe are struggling with each other.

Our women readers have a very deep interest in this war because a great many of them will send brothers or sons or husbands in the armies which Canada is organizing to assist the forces of Great Britain. Canada is a partner of Great Britain in this struggle, and must continue to do her part until peace is declared. What the cost will be it is impossible now to say, but we know that it will be terrific.

We are anxious to know whether our readers appreciate these war pictures and the news of the war which we publish in The Guide. We are very anxious to make The Guide attractive, interesting and helpful to all our readers, and the only way by which we can do this is by having the opinions of those who read The Guide from week to week. On another page we publish an announcement asking for such opinions and offering to pay for them. We hope our readers will send us a generous response to this request.

We want to specially recommend to our readers the advisability of advertising their own products. On nearly every farm in this country there is something that could be sold to good advantage aside from the grain which is shipped by car lots. It may be a piece of second-hand machinery that the farmer doesn't want. If he advertised it no doubt he would be able to sell it at half its original price, or perhaps more, to some farmer who does not feel able to purchase a new machine. By such a sale the farmer not only gets rid of the second-hand machine and has the money for it, but the one who buys it is also assisted. A small advertisement of such a second-hand machine in our "Farmers' Market Place" page will do good service to both buyer and seller and at the same time will help The Guide by giving us more revenue with which to produce a better paper.

No doubt a great many of our men and women readers will be purchasing new fur coats during the winter. What are they going to do with the second-hand ones? There are many people who would be glad to buy a second-hand fur coat at a reasonable price. A little announcement of such an article, published in our "Farmers' Market Place" page, will cost only a dollar or two and would find plenty of purchasers for the second-hand fur coat.

Last week we mentioned that we had a large number of subscriptions expiring in the next few weeks. It will be a great help to us if each one of our readers whose subscription is expiring will send in the renewal promptly. These are little things to the readers and we know how easy it is to overlook them, but the total of the subscriptions means a lot of money to us in a year and helps very materially towards meeting the cost of printing and publishing the paper. We want to ask each of our readers to give this matter a moment's thought. Look at the label on your paper and if your subscription has expired, mail us a dollar without further delay. We will do the best we can to publish a paper that will please you and we want you to help us by sending in your subscription promptly.

Finally, don't forget that we want your opinions and suggestions as to how to improve The Guide. The sooner you send us these suggestions the more quickly we can adopt them and the better we can make The Guide.

THE GRAIN GROWERS' GUIDE, WINNIPEG, MAN.



Painless

By our latest method we guarantee that we can perform any kind of dental work without the least pain, or **Refund your Money.**

New Method Dental Parlors

Cor. Portage and Donald

Canada's Best and Most Up to Date
Dental Office

SEED GRAIN WANTED

Any farmer who has seed grain, wheat, oats, barley, flax, timothy or any other kind of good seed grain for sale, should send a post card at once for a copy of our pamphlet: "How Farmers Can Make Money." It will assist them to dispose of their seed grain at a good price more quickly than in any other way. Write today.

THE GRAIN GROWERS' GUIDE
Winnipeg, Man.



A Durable Stable

This stable is 25 years old. You wouldn't think so, for it looks as good as new.

The Stall Posts are iron. No amount of battering by the horses will disfigure them. The Guards on the stalls are iron too, being made of 1/2-inch rods secured in a heavy frame. There is an iron oat-bowl and a manger made of iron rods. The horses cannot crib these—they always look well.

Equip your stable for all time by using

BT IRON Horse Stable Fittings

A BT Iron Stall Post pays for itself, for it outlives a dozen wood posts. That's true of BT Iron Guards and Mangers. They save all worry and expense of repairs.

The BT Iron Fittings add value to the horses, for they give them a sleeker appearance. A buyer can look right through the row of open stall guards and see all the horses, with the sunlight flooding over their well-groomed backs. He'll make a better price.

Our illustrated book fully describes these fittings. It is free. Simply write your name in the space below, tear out this Ad. and mail to-day. Address—

BEATTY BROS., LIMITED
2840 Dublin St., Winnipeg

Your Name

P.O.

Prov.