FUEL-SAVING DEVICES THAT COST NOTHING

Water is a fuel saver! The most trying of the hot summer days are those on which the air is filled with moisture. The thermometer on such occasions may register only 75 degrees but the heat nevertheless seems intense. The same quality of heat characterizes greenhouses.

It is in recognition of the effect of humidity that manufacturers of furnaces provide a water pan in connection with hot-air heating systems. This pan should always be kept filled. However, this water does little good on cold days when the furnace holds a brisk fire. The moisture it provides to the air is evaporated long before the air reaches the living rooms.

The surest remedy for dry air is a wide-mouthed receptacle for water in every room in the house. A pretty jardiniere is excellent for the purpose. Lacking jardinieres that are decorative in themselves, one can hang under each register a small tin can that may be filled with water each day. Be careful to see that the pail cuts off as little of the stream of hot air as possible. If the ledge under the register is deep enough, a pint or a quart fruit jar may be used instead of a pail. The amount of water evaporated each day is always surprising. The moisture not only makes more comfortable the occupants of the house but preserves the furniture.

SPRINKLING COAL AND ASHES.

Many people have their coal thoroughly sprinkled before it is dumped into the bin. This is done not only because it lays the dust, but because a certain amount of moisture in the coal gives the gases liberated by the burning fuel more of a chance to throw off the maximum amount of heat. The fact that there is gas to be burned in the furnace is something many people seem to lose sight of. They are careful of gas and realize that it gives heat when it comes to them through pipes to their gas stoves, but they stoke their furnaces as if they were burning only coal.

Another good use for water is in connection with the removal of the ashes from the furnace. For this purpose, it is an excellent idea to keep fastened to a convenient hose bibb in the basement, a length of hose that will reach to the furnace and that has a nozzle that may be adjusted to a spray if necessary. The ashes may then be sprinkled thoroughly before they are taken from the ash pit. Ashes so treated can be removed in such a manner as to effect a saving in unburned coal. Thew the contents of the ash pit lightly, and by shovelfuls, into a corner of the cellar. A little practice will reveal a way to do this so that the damp ashes form a heap in the corner and the unburned coal falls out on the floor around the bottom of the pile. After the ashes have been disposed of in this way for a few days considerable fuel will be found that may be put back on the fire from time to time. Some people use it exclusively for banking the fires at night.

OUTSIDE AIR.

In the case of a hot-air system, a great deal of fuel may be saved in the winter through the use of a cellar window in connection with the outside-air intake. On bitter cold days the air often sweeps in through the intake and on up through the furnace into the rooms in so short a time that it does not have a chance to become heated. On the other hand, if the damper in the intake is closed and only the air in the house used, the circulation is apt to be poor and the air soon becomes "close" by being used over and over.

To avoid this, shut the damper in the intake and open in the cellar a window as far as possible from the water pipes so they will not freeze. This allows plenty of fresh air to enter the house in such a manner as to insure good circulation, but instead of trying to heat air of below-freezing temperature, air is employed which has been warmed considerably by its passage through the furnace room and by contact with the warm outside walls of the furnace.

Before retiring at night, it is a good plan to give the house a thorough ventilating and see that the outside intake is closed so the place need not be chilled by bitter-cold air entering when the furnace fire is low. Also throw a small rug or crowd newspapers down in front of each door to bedrooms where windows are kept open through the night. These precautions will make the house much more comfortable in the morning before the fire has had a chance to warm it.

HEATING WITH ELECTRIC FAN.

It is certainly aggravating to have a good fire in the furnace and little heat coming up into the rooms above, as so often happens with a hot-air system when the wind is in the wrong direction. With an electric fan one can create an artificial circulation of air that will raise the temperature of the whole house in a very short time. If two registers are on one pipe, close the register in the room where the heat is least needed. Cut away the top and bottom of a box that, stood on end, will inclose the register. Set the fan inside the box, close to the register, and run it at low speed. Direct the current of air toward the coldest part of the room. Unless such a box is used to cut off the cold air from being sucked in from the top and sides of the fan, the breeze will be cold instead of warm. If this device can be used in connection with the longest pipe from the furnace where poor circulation is apt to be the rule, most often on the first floor, just so much more heat will be available.

SERVING THE KING

"Oh!" puffed Puffety-Puff.

"My!" blinked Blinkety-Blink.

"Yes!" pattered Patter-Pat.

The three little kittnes, not the ones who lost their mittens, but the three little kittens of the Fluffy-Fluff family, huddled together in a corner of the farm kitchen, discussing their future.

"Yes," continued Patter-Pat, "that is just what we should do. We are old enough to serve the King."

Puffety-Puff puffed and Blinkety-Blink blinked at their brother who had been named Patter-Pat because he always talked so fast and so much.

"And must we live in the Palace?" asked Puffety-Puff.

"Of course," nodded Patter-Pat. "We must journey to the Palace and offer ourselves to the King for service. The King will then give us the work for which he thinks we are best suited."

"But," blinked Blinkety-Blink, "what will become of the farm if we all should go?"

"The farm? We must not think about it. Our duty is to serve the King," answered Patter-Pat.

"But," insisted Blinkety-Blink, "we can't let the farm take care of itself. One of us must stay here."

"But I want to serve the King," puffed Puffety-Puff.

"And it is our duty. Don't you understand?" pattered Patter-Pat.

Blinkety-Blink blinked thoughtfully for several moments, and then said: "I want to serve the King, too, yet I feel that it is my duty to stay here and care for the farm, if you two want to go to the Palace. The crop feeds many a family, you know. Will you explain about this to the King when you reach the Palace?"

"Very well," pattered Patter-Pat.

"Very well," puffed Puffety-Puff.

So the two little kittens, Patter-Pat and Puffety-Puff prepared for their journey, and were very happy to think that they would soon be at the Palace serving the King. Finally they went away, leaving Blinkety-Blink all alone to care for the little farm.

And as Blinkety-Blink worked, he thought: "Perhaps I'll be serving the King, too, if I do my work well and love him in my heart." This thought made him very happy, and he forgot that he was doing Patter-Pat's and Puffety-Puff's work too.

But Patter-Pat and Puffety-Puff were not having the easy time that they had expected. They had never traveled before, and were always losing their way, it seemed. And many times they were forced to sit by the wayside because the roads were rough and stony. At such times they were sorry that they had left the quiet, peaceful farm.

After a long, long journey, they spied the towers of the Palace in the distance. How happy they were! They forgot that they were weary, and began to hasten their steps. Presently they reached the Palace, but as they were about to enter the gates, they were stopped by a Guard.

"Who are you?" asked he. "What do you want at the King's Palace?"

"We have come to offer ourselves to the King for service," answered Patter-Pat.

"But every place is filled," said the Guard. "There are no places for you."

Patter-Pat and Puffety-Puff were sadly disappointed. "But may we see the King?" they asked.

"Have you not heard? The King is away making his yearly trip round the Kingdom and awarding those who have served him. It isn't necessary to come to the Palace to serve the King, you know. People are serving the King all over the Kingdom," the Guard explained.

Patter-Pat and Puffety-Puff were surprised, indeed. "How do they serve?" they wanted to know.

"That is not for me to tell you. You will soon discover that for yourselves," answered the Guard.

Poor little Patter-Pat! Poor little Puffety-Puff! They had to go home. And all the way home they wondered how they could serve the King away from the Palace. When at last the two little travelers reached their home they found that Blinkety-Blink was holding a celebration. There were many neighbors present. And Patter-Pat and Puffety-Puff wondered what it was all about. But they didn't wonder long. They soon learned that Blinkety-Blink had been awarded a medal for service by the King, when he had stopped at the farm to investigate.

"And to think what we have missed!" sadly puffed Puffety-Puff.

"And we would have seen the King and been rewarded if we had stayed at home and done the work that we had to do," sadly pattered Patter-Pat.

But Blinkety-Blink, who was very happy in the thought that he had served the King by doing his duty, comforted his brothers. "The King will be round next year," he blinked.

Increase in Fruit Values.

As the Dominion Fruit Commissioner said in his address before the Pomological and Fruit-Growing Society of Quebec the particulars he was able to supply of progress in values do not look like blue ruin for the Canadian fruit industry. In some provinces there has been a decrease in the acreage devoted to fruit, but this simply means that the old hit or miss policy is disappearing and greater attention given to improvement in quality. Here is evidence of this furnished by the Commissioner, Mr. G. E. McIntosh: Prince Edward Island, less acreage, value increase of crop 23.33 per cent.; New Brunswick, less acreage, increase of orchard crop 81 per cent. and of small fruits 106 per cent.; Nova Scotia, increased value of orchard crop 156 per cent. and of small fruits 99 per cent.; Quebec, orchard crop increase in value 17.79 per cent. and small fruits 12.98 per cent.; Ontario, greatest reduction in acreage of any province, increased orchard value 72 per cent. and small fruits 159 per cent., and British Columbia, where being the maiden fruit province new orchards are coming into bearing, increase in orchard value 272 per cent. and small fruits 299.70 per cent. In connection with this phase of the situation the Commissioner gave utterance to a maxim that is well worthy of being taken to heart. He said, "In the long run it is as costly to grow poor fruit as to grow good fruit and yields little of that satisfaction which cannot be expressed in money."

Wintering Work Horses.

A farmer who owns efficient work horses naturally does not care to dispose of them in the autumn even though more than he can use in the winter. It then becomes a question of how best they can be kept for several months at the lowest cost. An experiment conducted for five winters at the Cap Rouge, Que., Experimental Station with mares and geldings from five to eighteen years of age showed that the animals did well on one pound of mixed hay, one pound of oats straw and one pound of carrots or swede turnips for each hundred pounds of their weight. Horses that are worked hard in the autumn, remarks Dr. Langelier, the Superintendent, should be brought up to their normal weight gradually over two weeks before changing the feed. Two feedings a day are sufficient during the winter, and if the horses are turned out for a short while on fine days, or every day when protected from the wind, they will be all the better.

Olive oil added to putty will prevent its hardening.

WHY TANTRUMS?

Five Rules to be Applied to Their Cure.

BY ELIZABETH CLEVELAND.

Neddy, at three, is possessed of the seven devils called, for convenience, "tantrums." Whenever his world opposes him, when he can't go out, when he must come in, when Mother goes to town without him, when brother teases him, when sister takes his ball, when he doesn't want his dinner, when bedtime interrupts his play—his evil spirits seize upon him and drive him to cast himself upon the floor and kick and shriek with fury.

When he does this, Mother sometimes drags him to his feet with slaps or sharp words, filling the atmosphere with retributive unpleasantness and adding fear and personal resentment to the unholy turmoil which is Neddy's naughty state of mind. Sometimes Grandma and the aunties gather about him with reasoning (to which he is in no state to listen), or coaxing which flatters his instinct for tyranny. Somteimes brother and sister laugh and point derisive fingers, sending him into fresh paroxysms of rage. Sometimes Father descends upon the situation with, "I'll show you how to manage this young man!" and vainly tries by blows to conquer the savage demons—a treatment which leaves Neddy outwardly subdued but inwardly aflame with hatred.

All these methods are as wrong as wrong can be—wrong, because they are stupid, unscientific, unsympathetic and ineffective.

If Neddy should show symptoms of any bodily ill, the first thing an intelligent doctor would do would be to try and find out and, if possible, remove the cause of the trouble. In the same way, the intelligent grown-up should realize that the first step in curing tantrums is to understand their cause.

What makes Neddy act this way? What makes Neddy feel this way? There umst be an answer.

"He's always had a frightful temper," sighs Mother. "He inherits it from his father's side of the family." Well, possibly, to some extent, but that doesn't mean so much as we used to believe. There are several cases on record in which a child's inherited temper suddenly ceases to function when the child's environment is changed—cases enough to make us wonder whether Neddy's tantrums are not caused less by inheritance from father's temper than by living with father's temper. Anyway we can't do anything now about Neddy's inherited qualities so let us consider what his environment has been.

We know on good authority that he came into this world equipped with the power to get angry, for science tells us that every normal baby is capable of feeling anger from the very first. We also know exactly what makes a baby angry and it is just the one thing that makes us all angry—interference.

When Neddy was taken from his mother's breast before he considered his dinner over, when his active little arms and legs were hampered by clothing, he screamed, clenched his fists, grew red in the face, showed all the familiar signs of "getting mad." Now that was the time to begin to be wise with him, but Mother thought he was "too little to discipline." She did not well enough understand the laws of habit-formation to know that every occasion when the baby accomplished his purposes by kicking and screaming, was fixing more firmly in his mind the practical value of tantrums.

Rule Number One for the treatment of tantrums is to begin with Tantrum Number One; and Rule Number Two is to see to it that baby does not get the thing he screams for.

Eleanor began to develop tantrums at five months old. She greatly enjoyed her bath and objected vigorously to being dried and dressed. When she was lifted from the water, she stiffened her little body and screamed with indignation. Never once did her mother make the mistake of putting her back into the water "just for a moment." Never once did her tantrum accomplish its purpose.

Her mother did another wise thing, which brings us to Rule Number Three. At the first shriek, she wrapped the baby in a warm bath towel, deposited her safely on the floor and left the room, returning the moment the screaming stopped. After a few of these treatments the baby gave up and allowed herself to be taken from the water without screaming.

Tantrums require an audience. They always are aimed at impressing somebody demanding attention. When Margaret entered the nursery school she was the victim of most terrific tantrums. Whenever she had one at home, she became at once the centre of an excited group, all scolding, coaxing, arguing, all paying attention to her. At school, her teacher merely said, "If you're going to make a noise like that, you'll disturb the other children. I'll have to put you in a room by yourself until you're quiet." This simple treatment was at once successful.

Of course the more firmly rooted the habit is, the longer it takes to break it. One two-year-old screamed for an hour on the first occasion he was kept in a room alone with his mother until he was fit to be a member of society. But the second time he screamed only fifteen minutes and never thereafter. So Rule Number Three in the treatment of tantrums is to refrain from any flattering display of attention or concern.

"But why not go a step farther?" asks the practical and busy mother. "Why not settle the thing the first time by making the consequences so unpleasant that the child will not dare to repeat it? Why not spank it out of him?"

This is probably the most fatal mistake we can make. It may, indeed, get quick results, but it introduces the very dangerous elements of fear and repression, with their sinister and far reaching effects.

We have seen that anger is caused by interference with what the child wants. Our problem is to show the child how to want what is worth while, how to form worthy purposes. When these purposes are interfered with, anger may be a virtue.

So Rule Number Four, the really important and constructive rule in dealing with tantrums, is to reach not merely the expression of anger but the feeling of anger, and try to direct it rightly. Of course we have to say, "This conduct will not do. You cannot be allowed to behave this way in civilized society. The rights of the whole group have to be considered. If you cannot control yourself so that the group is not annoyed, you will have to be removed from the group until you can." But we must also say with even more concern: "Now, let us see how you came to be so angry. Suppose Sister did take your ball? She is so little she didn't know any better—" or "she knows better than to take it without asking you and Mother must make her understand that she isn't to do it any more. But after all, it isn't worth getting so mad about. Try to think of something else to play until Sister can find it for you. We all get in each other's way and have to learn not to take it too hard when our little unimportant petty personal projects are interfered with." Or, "Yes, indeed, dear, I don't blame you for being mad at Henry for kicking his puppy. It makes me mad, too, to think of it. Such a cunning puppy and such a mean, cruel boy! But we won't get anywhere by just getting into a passion. We've got to do something. We've got to see that that puppy is taken care of. Let's save all our energy for that."

If a laugh can be gotten out of the situation, so much the better. Rule Number Five, then, in the treatment of tantrums is to avoid a provocative attitude and maintain at all times toward the child a spirit of consistent affection and support.

In so far as these five rules are observed, the problem of tantrums will be solved.

Fun for Home Evenings.

If you know how to play jolly games and have the knack of making others enjoy them, the evenings the family spend at home will always be remembered. Friends will get the habit of dropping in when they hear of your good times, and they will never miss party trimmings.

Sing Tag will start old and young to laughing. The players move about the room, and when the tagger approaches they are saved by starting a song, provided they sing something no one else is singing at the time. Until you have tried it you cannot know how hard it is to start a tune when others are being sung all around you.

No player is allowed to use the same tune twice but must start another each time he is in danger. He can sing one that has been used by someone else if it is not being sung at the time. Many tunes will be laughably off key, as the catcher dashes about suddenly setting off the players.

Interest in one's work is really a rest cure—Mr. Clement Jeffrey.

THE SEMI-SPORTS FROCK OF TWEED AND WOOL CREPE.

Very often a soft woolen frock is a necessity for comfort. The model pictured here is especially interesting to the miss and small woman of individual smartness, who demands unusual treatment in even the simplest of frocks. A soft tweedy material in gray and rose fashions this straight one-piece frock, with rose wool crepe forming the vestee, cuffs and set-on section at the lower edge of the skirt. An inverted plait extends from the hip to the hem at the left side, and has four large buttons for trimming. The long sleeves are joined to a short kimono shoulder and gathered into deep cuffs at the wrists. The collar may be worn buttoned up to the neck, while a narrow belt ties in loops at the centre back. The diagram pictures the partly finished frock, and No. 1108 is in sizes 34, 36, 38, 40, 42 and 44 inches bust. Size 38 requires 4¾ yards 36 or 40-inch, or 3⅛ yards 54-inch material. When making the vestee, cuffs and lower section of contrasting material, ⅞ yard additional is required. Price 20 cents.

Our Fashion Book, illustrating the newest and most practical styles, will be of interest to every home dressmaker. Price of the book 10 cents the copy.

HOW TO ORDER PATTERNS.

Write your name and address plainly, giving number and size of such patterns as you want. Enclose 20c in stamps or coin (coin preferred; wrap it carefully) for each number, and address your order to Pattern Dept., Wilson Publishing Co., 73 West Adelaide St., Toronto. Patterns sent by return mail.

Comfort for Grandma.

Keep the feet warm at night in order to feel rested and comfortable, but do not use hot-water bags or flat-irons unless absolutely necessary. They will cause chilblains and a tendency to take cold.

If the bed has light, warm coverings and an extra covering placed over lower half of bed one will be very comfortable. Something loose and thin may well be worn to cover feet and lower limbs. Try worn-out union suits, cut off below the waistline and with stocking feet attached.

A light knit vest with sleeves, under the gown, is better than one heavy garment or a burdensome weight of bedclothes.

Every one should have a hobby. Collecting oddities is lots of fun. A boy found a piece of a deer's horn out in his father's meadow and that set him to thinking about saving up the odd trinkets Nature strews about the fields. Now he has about a bushel of curious things such as stones, queer pieces of wood, Indian arrow-heads and shells. Every farm boy and girl can have such a little home-museum as this and it will give much pleasure.

Store seed corn in the attic, or in some place where it will not freeze. Do not pile it, nor put it in bags, but hang it up so the air can circulate around every ear.

The man who says he loves his home won't bank it up with horse manure to keep out frost—if he means what he says.

Scions for spring grafting—cut 'em now. Pack them in moist sand or sawdust and store in a cool place (not freezing) over winter.

WORLD GRAIN MARKETING RECORD ON PRAIRIES

With the grain movement in the West at its peak, a world record in grain marketing was reached on Thursday, November 19, when 3,447,624 bushels of all grains were marketed on Canadian Pacific Railway lines in Western Canada. On November 20, 3,559,000 bushels were marketed during the twenty-four hours, bettering even the world record of the day before. The nearest approach to these figures occurred in the banner year 1915, when on October 18 of that year 3,406,000 bushels were marketed.

These stupendous figures mean that the C.P.R. handled approximately 81 bushels of grain every second during the forty-eight hours of that period. If old-fashioned methods were prevailing, it would take forty thousand farmers' waggons to haul the grain across the prairies. If these teams were placed end to end they would form an unbroken line from Winnipeg to Brandon, or from Fort William to Schreiber, or from Regina to Saskatoon, or from Calgary to Field, or from North Bend to Vancouver, or from Toronto to Napanee.

From August 1 to November 20, 1925, inclusive, 148,078,445 bushels of all grains were marketed at Stations adjacent to Canadian Pacific Railway lines as compared with 109,651,136 bushels for the same period last year, an increase of about 35 per cent. Loadings show a similar increase over last year. One housand cars a day left Winnipeg each day during the present month — a car every seventy-five seconds.