

## "FUELLESS FURNACE" USES FRICTION TO HEAT AVERAGE SIZE HOME FOR "50¢ A DAY"

# Look! A Stove That Requires No Fuel

How about this — a fuelless furnace that uses friction instead of fuel to heat an average size home "for only \$15 to \$16 a month". What's more, it reportedly will sell for less than half the cost of a conventional oil or gas furnace.

Sound too good to be true?

"You bet," say some observers who claim the whole thing's a hoax — that it defies a basic law of physics. But others, including a host of small manufacturers and distributors have jumped at the chance to get in on the ground floor of a "breakthrough" development they feel can help solve the energy crisis. They have invested in franchises and hope to be taking orders for Eugene Frenette's fuelless furnace early next year.

It all started during the winter of 1977-78. It was costing Frenette, father of 12 children — 10 of whom are still at home — a whopping \$230 a month to buy fuel oil to heat his huge, old, uninsulated 12 room "Pillsbury mansion" in Londonderry, New Hampshire. He launched a crash program to perfect his invention — a simple but unorthodox 'fuelless' furnace which he maintains will be able to heat an average size home for only 50 cents a day and which he feels can be retailed "for \$600 to \$800".

Frenette installed his prototype friction heater in a 10-year-old washing machine. It's made up of two cylinders spinning in opposite directions. There is a clearance of  $\frac{1}{8}$  in. between the two cylinders which are lubricated by a quart of light motor oil. Spinning action of the cylinders and resulting friction produces the heat, according to Frenette.

He claims franchised models will be odorless (they don't require any chimney since no fuel is burned and there is no flame, soot or odor) and are as quiet as a refrigerator. All models will plug into a regular 110 volt outlet and will occupy no more space than a washing machine or dryer. Estimated operating cost to heat an average size, well-insulated home with a 200,000 btu friction "centric" heater is right at \$15 a month (for electricity to operate the motor).

One of the first successful prototypes was built in August by Max Johnston, owner of Johnston's Metal Specialties Co., Creston, Iowa. "I'll admit I was skeptical at first. Sounded like a hoax to me," says Max, who was hired by the owner of the "Frenette Furnace" franchises for Alaska and Kentucky to build a prototype. Following basic design specs supplied by Frenette, Johnston built a prototype which, in his words, "made a believer out of a lot of skeptics around here, including me. It cost about \$800 to build, including

about 40 hours of labor. Now that we've built one, we could build another in a lot less time. We estimated its output at between 100,000 and 150,000 btu's. The friction stove produced no odor, made no noise than you'd get with a furnace motor, and we had no vibration or other problems with the rotating circular drums which create the friction heat." Max told FARM SHOW.

According to Larry Nickerson, Frenette's son-in-law, all franchises except Washington, D.C., and Hawaii, have been sold. Some individuals bought up 3 or 4 states. Cost of a state franchise, based on population, was \$2,500 cash, plus an additional down payment payable on availability of the first approved stoves, and a remaining balance spread out over 20 years. The Iowa franchise, for example, was priced at \$145,000. Of that, \$2,500 was payable immediately to hold the franchise, with \$36,250 payable upon availability of Frenette-approved stoves for sale. The balance (\$108,750), plus interest, is payable over 20 years in monthly installments.

"I bought two states and others from this area bought up many of the other state franchises during the short time they were available," Harold Schweiss, of Sherburn, Minn., told FARM SHOW. Schweiss has hired a firm to produce a working model which was completed and ready for testing just as this issue went to press.

"Frenette came up with the idea but doesn't have manufacturing or marketing expertise," explains Schweiss. "Individual franchise holders are taking the patented idea to local manufacturers to get a working model. These models, subject to Frenette's approval, will then be produced and sold when they've met the usual battery of tests. Eventually, the best features of these prototypes will be combined into production models which will be essentially the same but produced by a number of different manufacturers," Schweiss explains.

Since unveiling his invention to a local newspaper, Frenette has had to schedule appointments for the many people who have stopped in to see it. Visitors have included politicians, engineers, scientists, representatives of power companies, representatives from the Small Business Administration, heating specialists and dozens of persons wanting to buy state franchises to manufacture and market the new-style stove.

Frenette says his stove has been called into question only by those who have not seen it. And those who have seen it have not agreed on how it works.

Physicists not only deem the claim untrue, they are incensed that the so-called friction furnace is getting so much attention, according to a recent story in New Hampshire Profiles magazine by Robert Sullivan. The story offers the following opinions on Frenette's fuelless furnace:

"Professor William Mosberg of the University of New Hampshire asserts that any machine trying to heat a medium-sized home on 2 hp. of energy 'is against all basic laws of thermodynamics'. Mosberg has not seen the machine, but says 'of course, I am skeptical'.

"Professor John Kidder, of Dartmouth, hasn't seen the furnace either, but he is more than skeptical. 'This is a complete hoax,' he says, then tempering that statement somewhat. 'Either it's a hoax or the person's deluded about what he's getting'.

"Kidder continues: 'You can't get energy out without putting energy in. He can't make energy, he can only transform it'.

"Robert Davis, a researcher at MIT's Lincoln Laboratory in Lexington, Mass., also quotes the law of physics that Kidder cited, and he goes further. He says he would be

incensed as a taxpayer if funds were approved for development of the furnace. He concludes that the machine as it has been described to him would produce heat equivalent to that of 2 hair dryers."

Meanwhile, Frenette — a former home builder who operated a highly successful asphalt business for 18 years until 2 heart attacks forced him into early retirement — and his franchise holders, along with a host of other supporters, remain undaunted. They envision producing upwards of 100 different models to take care of a wide variety of heating needs — such as in small apartments, small homes, big houses, stores, shops, factories, and other buildings. There could even be models which would make it feasible to heat swimming pools, extending the season to 12 months of the year with enclosures, says Frenette.

You'll be hearing more about the controversial stove if and when production models become available. Meanwhile, for more details, contact: FARM SHOW Followup, Frenette Furnace, Box 255, Derry, N.H. 03038 (ph 603 432-8313).

**Eugene Frenette pours hydraulic oil into his prototype "fuelless furnace". The oil, combined with the spinning action of two cylinders, supposedly creates friction which, in turn, produces the heat. "Defies a basic law of physics — a complete hoax," say skeptics. Prototype shown below has been used to provide supplemental heat in Frenette's 12-room house.**



Photos courtesy Montachusett Review

