Popular Science AWARD

Popular Science Monthly announces another in its series of Awards presented in recognition of companies and individuals making outstanding contributions to American living in fields of interest to PS readers. The ninth selection of the Popular Science Editorial Board:

Sheldon Coleman and The Coleman Company

The company, whose founder brought light to all outdoors, continues to brighten camping for sportsmen everywhere with new comforts and conveniences. Under the leadership of Sheldon Coleman, the company now makes a wide and growing range of outdoor recreation and camping products that have the same durability, safety, and ease of operation that marked the original Coleman lantern. Sheldon Coleman and the Coleman Company are fitting winners of the Popular Science Award for these outstanding contributions to outdoor living.

EUGENE S. DUFFIELD
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Smooth

How that fabulous family—the Colemans—made camping a spor you can enjoy in all four seasons

By HERBERT SHULDINER

It seemed like an item that might b doomed as soon as the first electri lines were run in—that gasoline mantl lamp that W. C. Coleman started sellin at the turn of the century when incandes cent electric bulbs were just coming int their own.

Not so. Instead of becoming obsolete it was improved—and the Coleman port able gasoline lantern became Old Reliabl to millions of outdoorsmen. Today' lantern is as modern and indispensabl to the man who likes to rough it as rocket to an astronaut.

Lighting up the woods. Over 18 millio Coleman lanterns have been sold to date with 14 million of them (Coleman esti mates) still in use. Certainly these a most indestructible lanterns helped lea camping out of the dark ages. Late Coleman products—stoves, heaters, tents sleeping bags, coolers and jugs, traile campers—have smoothed the modern ver sion of roughing it.

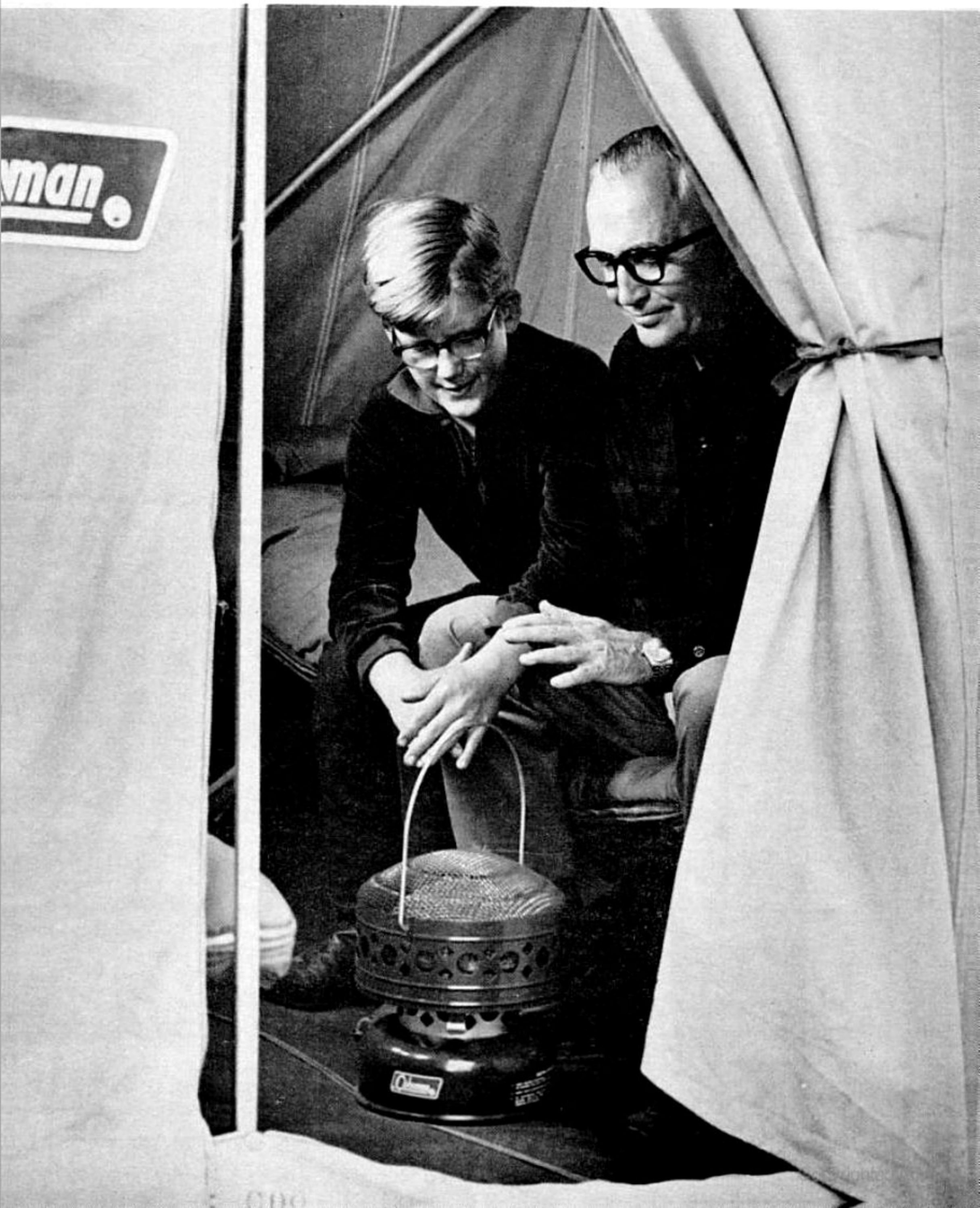
Few people had enough leisure tim to rough it in the company's first decades But Coleman never stopped perfectin outdoor hardware. In fact, it was durin the depression-racked thirties that W. C Coleman's oldest son Sheldon took ove the firm's research and development pro grams.

He launched the company in th home-heating business and, by 194 Coleman led the nation in the produ

Continue

Sheldon Coleman and son, She don II, test catalytic radiant heat that has no flame. The heat comes in three models: 3,50 BTU, 5,000 BTU, and a unit th you can adjust to either ratin

Way to Rough It



tion of gas floor furnaces and was a leading manufacturer of oil space heaters.

Forward into battle. World War II brought these activities to a halt, and Coleman turned its camping-hardware know-how to helping the war effort. More than a million lanterns and "pocket" stoves (the inspiration of today's one-burner Coleman Sportster stove) traveled with GIs all over the world.

At the same time, Sheldon Coleman prepared the company to meet an expected post-war demand for outdoor hardware.

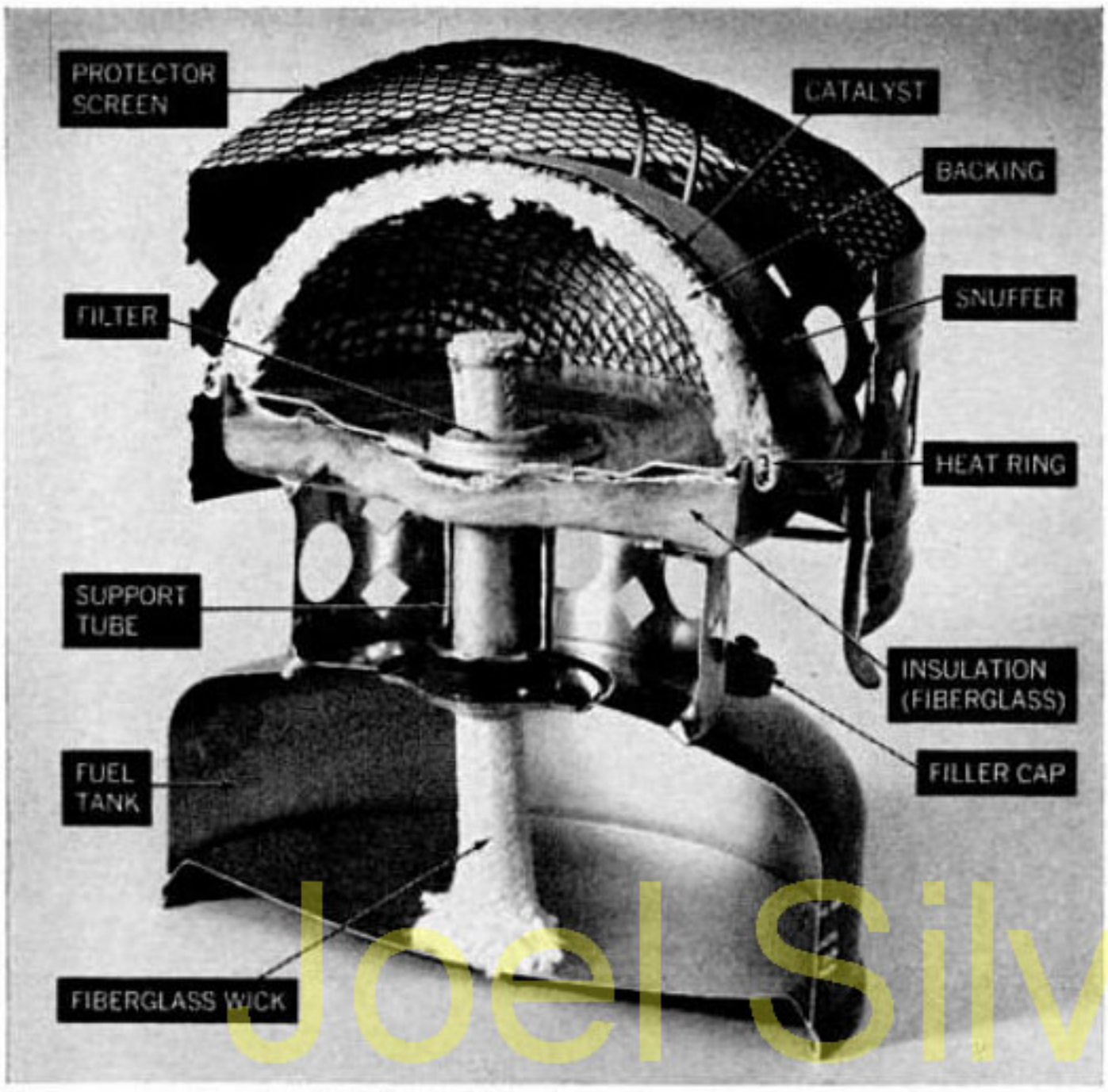
This planning sparked Coleman's growth, making them the largest manufacturer of camping and outing equipment in the world. Their plants turn out 4,000 lanterns (in half a dozen models, one of which burns LP fuel) and 3,000 sport and camp stoves every day. Coleman is also the world's largest producer of portable coolers and thermal jugs, second largest of tents and sleeping bags. And Sheldon Coleman says, "We expect to be the first in those areas within three years."

Instead of resting on these laurels, the company continues to search for new ways to help campers. "We're always probing the needs of people who live outdoors," says Coleman.

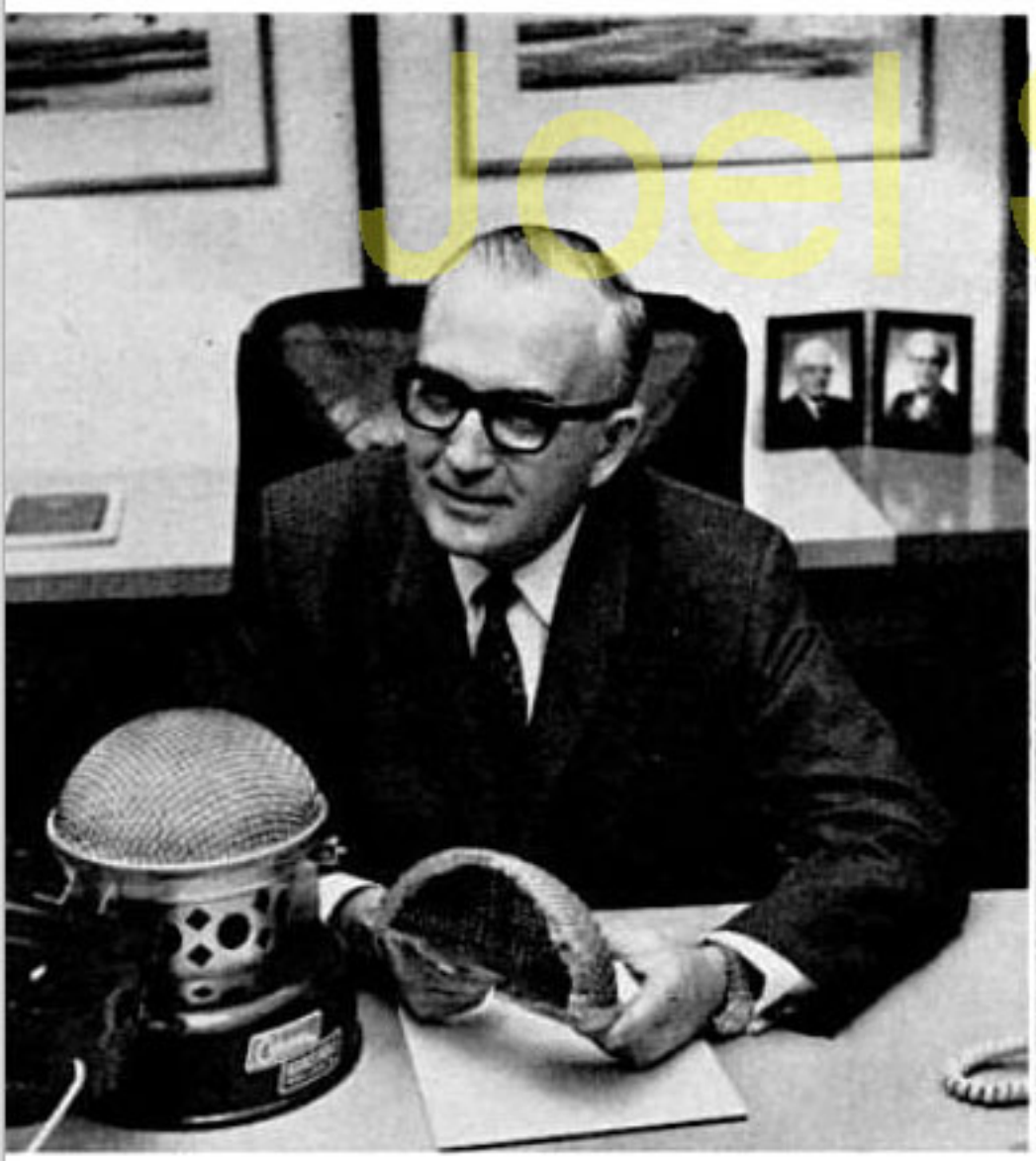
For years, the need for a way to satisfactorily and safely heat a tent was obvious. To fill this need Coleman launched into new research to perfect a catalytic heater. There were such heaters around, but they had one major defect—their ability to provide a full-rated heat output diminished as the temperature plummeted, when heat was needed most.

Getting hot. A little over two years ago, Coleman perfected a white-gasoline-burning catalytic heater that could put out its full-rated heat potential, regardless of how low the temperature got.

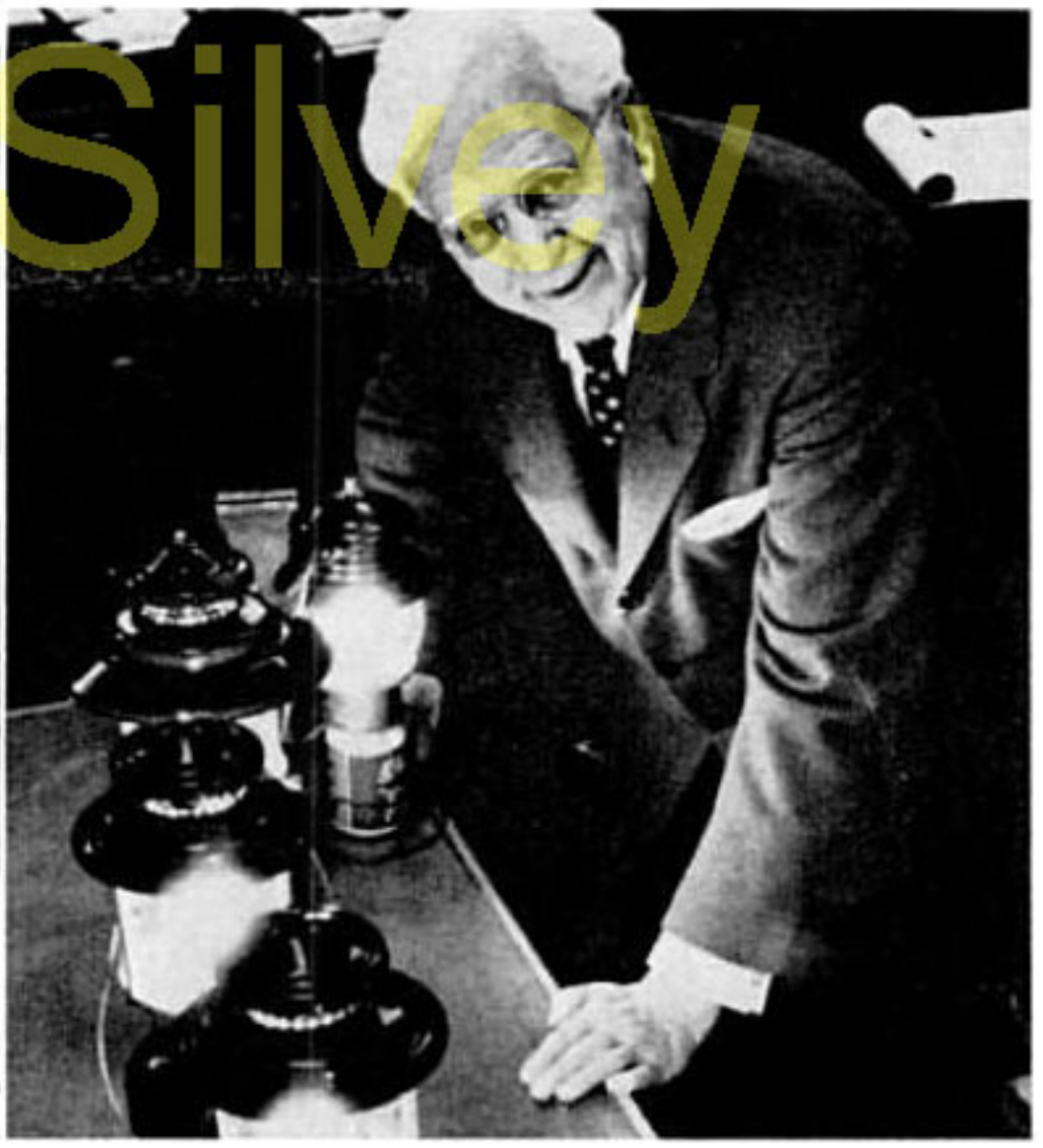
The biggest advantage



Cutaway photo of catalytic heater shows how the wick carries vapors to the heating head, which has platinum catalyst that burns gas without producing flames. Below, Sheldon Coleman prepares breakfast for his son on regulation folding stove—long a mainstay of the Coleman line.



Efficient little heat maker, the catalytic heater burns up its fuel completely at about half the temperature needed for ordinary combustion.



The founder of the great outdoor-equipment firm, W. C. Coleman, displays some of the lanterns he perfected to provide campers with safe tent lighting.

the catalytic heater is that it's flameless. The heating head is impregnated with a catalyst of platinum dust (see cutaway photo). Combustion ordinarily takes place at about 1,800 degrees F. But the platinum catalyst enables you to get complete combustion at about 800 to 900 degrees—not enough to produce flame.

You can place a tissue on the heater's protector screen and it won't char, let alone catch fire.

How the heater works. Once the head starts burning, gasoline brought up from the tank by the fiberglass wick vaporizes under the head. A dense ⅝-inch refractory backing under the catalyst-impregnated head controls the flow of fuel and distributes the vapor evenly under the head. Outside temperature has little affect on the fuel's viscosity; it continues to flow consistently through the wick, allowing steady combustion.

One filling of fuel will warm you 18 to 20 hours—enough for two nights, depending on the temperature of the space you want to heat. The 5,000-BTU heater will raise the temperature of an eight-by-10-foot tent about 25 degrees above outside temperature. In tighter structures, you'll get more heat; in more ventilated ones, somewhat less. In tents, the heater gets its needed oxygen through the "breathing" fabric. But if you use the heater in a tight area, be sure to crack a window to replenish the oxygen consumed in combustion.

Besides heating tents, the catalytic heater is ideal for one-car garages, outdoor sheds, and ice-fishing huts. It is also handy for speeding the curing process for certain resins and other repair materials.

The huge success of the catalytic heater has sparked Coleman's current expansion program to meet the ever-growing need for outdoor equipment. "I can't see how this trend will change," Sheldon Coleman says. "The population is expanding rapidly and people are going to have more leisure time, not less.

"We're working on new materials to provide these people with new and better things. Some, like the four-layered Tri-Temp sleeping bag and the easy-to-erect exterior-frame Oasis tents, are two developments of this research."

What other new things will come from the remarkable Colemans can't be fully anticipated, but that their unmistakable label will be seen more frequently in the great outdoors in coming years is pretty certain. They're number one in outdoor equipment, but they keep trying harder. PS