# Controlled Flame DESTROYS WEEDS



# FLAMEGUNS

for AGRICULTURE • ANIMAL BREEDERS

CEMETERIES • COLLEGES • FORESTRY • GARDENS

GOLF CLUBS • GOVERNMENT BUREAUS

HOMES • HORTICULTURISTS • INSTITUTIONS

PARKS • POULTRYMEN • PUBLIC UTILITIES

# Discover what the Controlled Flame of a HAUCK FLAME-GUN Does on a Hundred Varied Jobs

Saves Time • Money • Labor on Any Kind of Weed Burning Disinfecting • Firing • Destroying Heating and Melting Job

1 FLAME-GUN Does the WORK of 4 MEN

#### PUT IT TO WORK THE YEAR ROUND

#### IN THE SPRING

Hauck Flame-Guns are used to clean up left-over rubbish from last season—along the fence rows and in the back lot—disinfect seed beds—burn out poultry runs and livestock yards — disinfect brooder houses and equipment—nip young weeds as soon as they get started—burn brush from early spring pruning.

#### IN THE SUMMER

Hauck Flame-Guns are used to destroy weeds, poison ivy, sumac and other persistent growths—burn brush from early summer pruning—clear ditches and road gutters—destroy piles of disease-carrying decayed fruit and vegetable culls—fire incinerators and break large rocks.

#### IN THE FALL

Hauck Flame-Guns are used to remove accumulations of brush and vegetation that harbor all sorts of plant and animal parasites and bacteria over winter—burn late weed seeds on the stalk, before they fall and scatter—disinfect laying houses and animal pens—burn out tree stumps—kill crab grass.

#### IN THE WINTER

Hauck Flame-Guns are used to thaw out frozen pipes—melt ice around drains and in culverts—thaw out cordwood and gravel piles—keep the water supply open—thaw out ground to permit digging.







EDGING UP DRIVEWAY

BURNING TALL GRASS

KILLING POISON IVY

# HAUCK FLAME-GUNS ARE USED AND RECOMMENDED BY

AGRICULTURAL COLLEGES
ANIMAL BREEDERS
ATHLETIC CLUBS
CEMETERY ASSOCIATIONS
CITY & COUNTY ENGINEERS
COLLEGES
COUNTRY ESTATES
DAIRYMEN
DUCK RAISERS
ENTOMOLOGISTS
EXPERIMENT STATIONS
FARM OWNERS
FISH HATCHERIES

FLORISTS
FORESTERS
FRUIT GROWERS
GARDENERS
GOLF & COUNTRY CLUBS
GOVERNMENT BUREAUS
GREENHOUSES
HIGHWAY DEPARTMENTS
HORTICULTURISTS
INSTITUTIONS
IRRIGATION DISTRICTS
KENNELS
LANDSCAPE ARCHITECTS

NURSERYMEN
ORCHARDISTS
PARK DEPARTMENTS
POULTRYMEN
PUBLIC UTILITIES
RANCHERS
REAL ESTATE
DEVELOPMENTS
SPORT CLUBS
SUBURBAN HOMES
TENNIS CLUBS
TREE SURGEONS
UNIVERSITIES

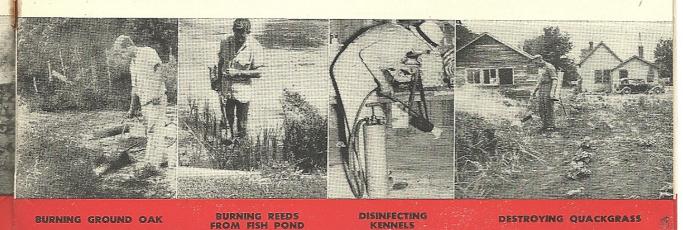
# AN INVESTMENT THAT PAYS FOR ITSELF MANY TIMES OVER ON JOBS LIKE THESE

POWERFUL
WINDPROOF
EFFICIENT
SAFE • LIGHT
CONVENIENT
INEXPENSIVE

Burning All Undesirable Growth Backfiring and Strip Burning Destroying Grubs and Insects Incinerating and Disinfecting Sterilizing Cans and Utensils Heating, Melting, Drying Splitting Rocks and Boulders Charring Fence Posts

Burns Weeds While Green, Stem, Stalk and Seeds— 18" to 60" from Burner, depending on Moisture Conditions

Order the Flame-Gun to Meet Your Exact
Needs and Pocketbook —ON 10 DAYS TRIAL



# Here's What the HAUCK FLAME-GUN Can Do For You

# When You Buy a HAUCK FLAME-GUN

# You Get ... the ONLY BURNER

which produces a "flat flame" of 2000° F.

The patented oval coil construction gives the flame a much greater spread when it strikes the ground, stone walls, etc., so that each gallon of oil gives you larger and speedier coverage and greater weed killing capacity.

#### the FIRST BURNER

The original weed burner for agricultural use, placed on the market by Hauck in 1927, was an adaptation from the large industrial burners which the company pioneered in manufacturing since 1900. Forty-six years of experience and improvements have been built into the Flame-Gun which, with its patented flat flame supersedes the round, thin flame of ordinary burners.



Burning weeds with a "Vulcan" Flame-Gun.

#### BURNING WEEDS WITH A TORCH

Reproduced by permission from an article by Wilfrid Wheeler in Horticulture Magazine.

A very useful device for destroying weeds by burning has come on the market. The instrument is nothing more than a modified and enlarged plumber's torch, burning kerosene instead of gasoline. The torch is best adapted to small places although there are large sizes which can be used in more extensive operations. In fact, some of the railroads now use the same principle to burn the weeds, that grow between the rails, these burners being attached to a specially constructed car.

Destroying weeds by burning has in some places many advantages over other methods, particularly in tennis courts, walks, drives, and around frames and buildings where it is not necessary to cultivate, and hand weeding is very expensive.

In gardens where chickweed, purslane and other quick seeding weeds are common, the torch is invaluable. It must, however, be used often to get the weeds just as they are starting as it takes less time to kill small weeds than large ones. Plants must be set in rows in order to use the torch to best advantage and a little practice will enable the operator to go quite close to the plants without injur-ing them. In burning grass from walks, drives and tennis courts, it will be necessary to go over the ground twice. The first day kills the grass and the second entirely burns it up. Such deep-rooted grass as quack grass can be killed by several burnings, for al-though quack grass will sprout after two or three burnings it will seldom survive four. We have found the torch very valuable in preparing seed beds in frames. After the beds are prepared and smoothed, the torch is passed slowly over them and most of the weed seed near the surface is killed. Better still if the beds can be prepared a week in advance of seeding, the weed seed will sprout and the torch kills the young weed seed-lings readily.

The same method holds true with seed sown in the open. Prepare the soil as usual, open the rows for the seed, pass the torch slowly over the row, sow the seed, and cover with sand, peat or sterile soil and you will have few weeds to bother the young seedlings. These torches are often used in poultry houses, dog kennels, and in stables, but care must be taken to prevent fires. As a rule the torch burns about a gallon of kerosene an hour so that the cost of operating is very small.

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# It Is a Versatile Tool for EVERY DAY USE It Saves You Money

#### **BREAKING LARGE ROCKS**

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The breaking of large rocks or boulders too large to be removed by ordinary methods prove a simple task for the Flame-Gun with its clean intense flame of 2000° F. Certain types of rock actually melt when the flame of the gun is applied for a few minutes. Other types of rock should be heated to a red heat. The gun is then pulled away and a bucket of cold water dashed on the rock, which splits in many pieces. Granite requires no application of water as when sufficiently heated, granite will chip out because of the expansion that has taken place.

Stones or rocks sticking up 5" or 6" in newly made driveways are a nuisance and hard to avoid. Many old driveways develop this same trouble. A quick application of the Flame-Gun at the top will burn or crack the rock off even with the ground.

#### FENCES AND STONE WALLS

Creeping vines, ivy and even some briars have their origin deep down in the crevices of stone walls and rock piles, or in tight fence corners. With a stone wall as a background, the flat flame of the Hauck Flame-Gun mushrooms to several times its regular size, effectively disposing of these growing pests. The flame reaches into corners between the stones, under and around wire fences, and other out-of-the-way places and does a truly remarkable job that could not be accomplished any other way.

#### **DESTROYING BRUSH AND VINES**

The clean, intense heat of 2000° F. flame temperature is an acknowledged method of destroying brush, tangled vines, hedges, etc. Special procedure in burning is necessary, because of the special nature of the brush problem. Where the growth is lower than 3 feet high it can be completely killed by scorching it within a few inches of the ground. This scorching kills the brush—the wilted remains can be burned to an ash four or five days later, when the growth will have dried out.

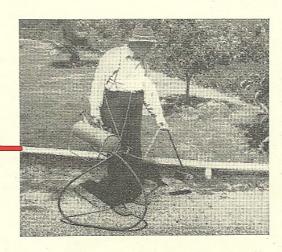
Where the brush is higher than three feet it is best to first cut it with a brush hook. Allow this cut brush to lay where it falls and dry out for a few days, then burn both the fallen brush and the growth in the ground in a single burning. This burning will kill about 80% of the roots, as well as consume the growth itself. A second burning a few weeks later will eradicate the remainder. An occasional torching once or twice a season will keep down any new growth.

#### IRRIGATION AND DRAINAGE DITCHES

The rank growth of green weeds, so frequently met with in ditches, on ditch banks, in ditch gutters and trenches, gives way speedily and effectively to the proper application of the Hauck flat flame. Clean, serviceable areas for water supply or free drainage are obtained without destroying the shoulder of the ditch. With the Hauck Flame-Gun, irrigation ditches are always ready for irrigating; being cleared of all growth the ditch ground becomes hardened, and a free and better passage of water results. Irrigation ditches, ordinarily requiring a 10 or 15 day clearing by hand or with a hoe, are frequently cleaned in a single day when the Hauck Flame-Gun is used.

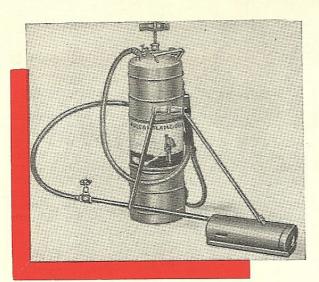
#### **DISINFECTING POULTRY HOUSES**

Controlled flame today is recognized as the one sure and safe way to disinfect poultry brooder and laying houses. The application of a clean, intense heat of 2000 degrees F. flame temperature destroys coccidiosis cysts, worm eggs, intestinal parasites, mites, lice and all forms of insect life and bacteria inhabiting the interiors of poultry houses. A torching of top soil, approaches and equipment frees them entirely of germ life, insects, weeds and weed seeds. The Hauck Flame-Gun is endorsed and recommended by Experiment Stations, Agricultural Colleges and Poultrymen as being 100% effective in destroying germs of coccidiosis, B.W.D. and worm eggs, and for cleaning up plague spots to reduce mortality.



Edging up a driveway with a "Vulcan Glider" Flame-Gun.

# HAUCK "Vulcan" FLAME-GUN



Reddish Blue FLAT Flame Spreads 6"Wide by 26"Long

**Exclusive Broad Flat Flame of** 2000° F.

Clean, Intense, Consuming Fire Always Under Operator's Control. Low Cost All-Purpose Unit.

Burns Kerosene, Range Oil, Stove Oil or Light Furnace Oil

The universal popularity of the Hauck Vulcan Flame-Gun is due to its low initial cost, obtained without sacrificing the greater heating value and larger burning coverage of the Improved Flat-Flame Burner (fully patented) that produces a "fan-shape" flame spread. This supersedes the round thin flame of ordinary burners, giving an even,

intense, forced heat, which spreads from the burner like a hand with the fingers extended, mushrooming out against the ground, stone wall, or rock pile, to "melt" every growing plant within its range.

The "VULCAN" Flame-Gun consists of a 4-gallon capacity, all-welded steel tank (not riveted or soldered), tested at 100 lbs. pressure, fitted with tank handle and snap shoulder strap; quick-acting, long-stroke pump which does not have to be removed when filling tank because a "hand-tite" filling plug (requiring no wrenches) is provided; 60-lbs. pressure gauge; 6-ft. length of oil resisting hose with brass couplings and the fully enclosed steel coil Hauck patented FLAT FLAME Burner with windshield, back-plate and removable pan, fitted with bronze regulating valve and carrying handle. Overall length of burner including valve 371/2 in. Average oil consumption 1 gallon per hour, net weight 21 lbs., **PRICE \$22.00** shipping weight 23 lbs. Code Word — YEYCF

F.O.B. Brooklyn, N. Y.



Burning Safety Strip with a "Vulcan" Flame-Gun.

#### **10 DAYS TRIA**

Order a Hauck Flame-Gun on 10 Days Trial. If not satisfied in every way, return it at our expense.



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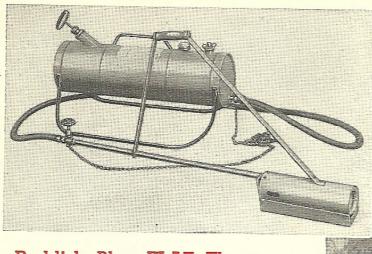
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Disinfecting Poultry Houses with a "Vulcan" Flame-Gun.

# HAUCK "Vulcan Glider" FLAME-GUN

Takes The Fuel Tank Off Your Back



TANK GLIDES OVER THE GROUND AS YOU BURN

Reddish Blue FLAT Flame Spreads 6"Wide by 26"Long

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Burns Kerosene, Range Oil, Stove Oil or Light Furnace Oil

Burns only 6% Fuel Vapor and 94% Air



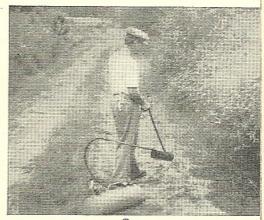
# THE BURNER

The Glider principle, embodied in the construction of the new "Vulcan-Glider," has made this model the largest selling Flame-Gun. It has the low initial cost, larger burning coverage, and "fan-shape" flame spread of the regular "Vulcan Flame-Gun." But it goes far beyond the limits of the regular "Vulcan" in ease of operation. With the "Vulcan-Glider," all you carry is the burner. The fuel tank glides easily over the ground as you burn the weeds. The carrying handle perfectly balances the burner. A heavy steel sash chain, copper coated, attached between burner handle and fuel tank, pulls the fuel tank. All steel runners permit the fuel tank to glide easily and smoothly over the ground.

The "Vulcan Glider" Flame-Gun consists of a 4-gal. capacity all-welded steel tank, tested at 100 pounds pressure, fitted with tank handle and two steel run-ners; all-brass and quick-acting, long-stroke pump, which does not have to be removed when filling tank because a "hand-tite" filling plug, requiring no wrenches, is provided; 60-lb. pressure gauge, 8-ft. length of oil-resisting hose with brass couplings, and 7 ft. of steel sash chain, copper coated, and the fully enclosed, seamless steel, removable coil type Hauck patented flat flame burner with windshield, back-plate and removable pan fitted with bronze regulating needle valve and carrying handle. Overall length of burner, including valve, 37½". Average oil consumption one gallon per hour. Net weight—24 lbs. Shipping weight—26 lbs. Code word—YELUM.

F.O.B. Brooklyn, N. Y.

PRICE \$24.00



Burning Wild Raspberry and Wire Brush with a "Vulcan Glider" Flame-Gun.

# HAUCK "Little Giant" FLAME-GUN

Burns only 6% Fuel Vapor and 94% Air



The "LITTLE GIANT" Flame-Gun consists of a 1½-gal, all-welded steel tank, tested at 100 lbs. pressure; powerful, quick-acting pump; 60-lbs. pressure gauge; "hand-tite" filler plug (requiring no wrenches). Full length grip handle with eyelets and snap shoulder strap assures perfect balance and easy handling. The burner is the Hauck patented FLAT FLAME with seamless steel coil, windshield and needle type regulating valve. Average oil consumption, 1½ gallons per hour. Net weight, 17 lbs. Shipping weight, 25 lbs. Code Word YENUP

F.O.B. Brooklyn, N. Y.



Work of Six Men Pulling Grass and

Brush by Hand.

Disinfecting an Animal Pen with a "Little Giant" Flame-Gun.

### 10 DAYS TRIAL

PRICE \$33.00

Order a Hauck Flame-Gun on 10 Days Trial. If not satisfied in every way, return it at our expense.

#### WORTH MANY TIMES ITS COST

I find the Little Giant Flame-Gun the most satisfactory implement for keeping ditches cleared, that I have ever seen. Also find it worth more than its cost many times over for eradicating weeds. After a little experimenting, I find it practical to burn between crop rows, destroying both weeds and seeds. I think I have been responsible for two sales in Lake Worth, one to the Golf Course and one to a poultryman, for sterilizing his hen houses and yards. Byro-Meda Farm, Lake Worth, Fla. He eas bur in 1 and

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# HAUCK "Giant Glider" FLAME-GUN

For Continuous Flame Application Jobs



Heavy duty, general purpose unit constructed on popular glider principle for ease of operation. Furnished with large size, patented built-in "Flat-Flame" burner with carrying handle and steel runners. Folding burner stand holds gun in place for continuous flame application on such jobs as heating stones, rocks and boulders, burning out big sods, stumps, etc.

The "Giant Glider" Flame-Gun consists of a 5-gallon capacity all-welded steel tank tested at 100 lbs. pressure; fitted with combination handle and hose rack; two steel runners; 3 ft. of steel sash chain, copper coated, with pulling handle; a powerful quick-acting pump; 60-lb. pressure gauge; "hand-tite" filler cap requiring no wrenches; a 12-foot length of oil-resisting hose with brass couplings. The burner is the Hauck patented FLAT FLAME seamless steel coil burner, with windshield, regulating needle valve, carrying handle and two steel runners. Equipment includes folding burner stand. Net weight 36 lbs. Gross weight 42 lbs. Code Word YIBDE

F.O.B. Brooklyn, N. Y.

#### **NECESSARY EQUIPMENT ON THE FARM**

The Little Giant Flame-Gun I purchased from you has given very satisfactory service in every instance. Its uses are so many and so varied that it has become necessary equipment on my farm, burning out hedge rows, fence rows, ditches, destroying the harbors for insect pests such as chinch bugs, grasshoppers, that take a heavy toll if left unmolested in their winter quarters.

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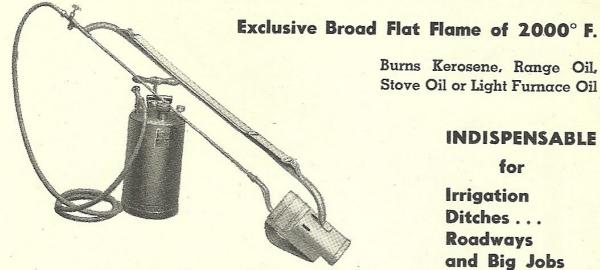
Louis Spinner, Hillsboro, Illinois

Melting Ice from Roadway with a "Giant Glider" Flame-Gun.



# HAUCK "Hercules" FLAME-GUN

Burns only 6% Fuel Vapor with 94% Air



Reddish Blue FLAT Flame Spreads 15" Wide by 30" Long

Stove Oil or Light Furnace Oil

Burns Kerosene, Range Oil,

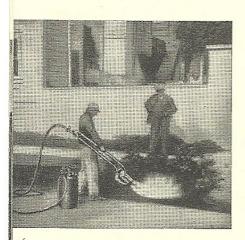
#### INDISPENSABLE

Irrigation Ditches . . . Roadways and Big Jobs



Destroying Rubbish Heap with a "Hercules" Flame-Gun.

A strictly heavy duty Flame-Gun for large scale weed and brush burning operations. Burner flame temperature 2000° F. gives rapid and positive weed destruction. Designed for continuous or daily use. Particularly recommended for heavily infested large weed or brush areas. Also for irrigation and drainage ditch clearing, highway, street or road departments, etc. The 25-foot length oil hose gives greater operating radius.



Cleaning Gutter with a "Hercules" Flame-Gun.

The "HERCULES" Flame-Gun consists of a 5-gallon allwelded steel tank, tested at 100 lbs. pressure; powerful, quick-acting pump with safety check valve which makes it impossible to pump more than 45 lbs. pressure into the tank: 60-lb. pressure gauge; tank needle valve; "hand-tite" filler cap (requiring no wrenches); one 25-ft. length oil-resisting rubber hose and brass union connections; and the Hauck patented FLAT FLAME scamless steel coil burner with windshield; oil needle valve; removable oil strainer; fulllength grip handle with snap shoulder strap, assures perfect balance and easy handling. Average oil consumption, 2 gallons per hour. Gun, net weight, 16 lbs. Equipment, net weight, 32 lbs. Shipping weight, 50 lbs.

Code Word YENLE

**PRICE \$58.00** 

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F.O.B. Brooklyn, N. Y.

# HAUCK "Hercules" FLAME-GUN

#### ON WHEELS - A NEW MODEL

Heavy Duty . Compact . Conveniently Portable

For all heavy duty and large scale weedburning operations. Extensively used and preferred for irrigation and drainage ditches, highways, roadways and driveways, parking spaces, vacant property, athletic fields and tracks, sanitation and mosquito control work, etc.

Roller bearing wheels make the new model "Hercules" Flame Gun conveniently portable. Larger tank capacity affords longer, continuous operation without refilling.

The "Hercules" Flame Gun on Wheels has the same heavy duty burner and 25-ft. length oil resisting hose as furnished with the standard "Hercules" Flame Gun but is equipped with a 15 gallon capacity heavily healed steel fuel tank, guaranteed for 100 lbs. working pressure, fitted with a long stroke quick acting hand number 100 lbs. with a long stroke, quick-acting hand pump; 100 lbs. pressure gauge with air release; tank oil needle valve; 'handtite' filler cap (requiring no wrenches). Tank also fitted with 2 - 24-inch roller bearing wheels, cold rolled steel axle, handle bars with hose rest, burner support, tank leg and foot rest. Net weight, 150 lbs. Shipping weight, 165 lbs. Code word: YOKTO.

F.O.B. Brooklyn, N. Y.

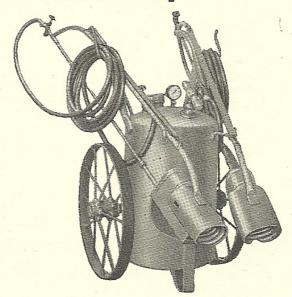
### "DOUBLE HERCULES" FLAME-GUN ON WHEELS Double Burners Mean Double Duty

This popular new model accomplishes the job in half the itme. The 2 - 25 ft. lengths of oil hose permit burners to operate up to 50 ft. apart. Burners and hose supported on tank when being transported. Specifications same as "Hercules" on wheels, but furnished with fuel tank of 20 gallons capacity. Net weight, 205 lbs. Shipping weight, 225 lbs. Code Word: YOKUV. PRICE \$140.00

F.O.B. Brooklyn, N. Y.

# "HERCULES" HEAVY DUTY FLAME-GUN BURNERS ONLY With Heavy Welded Steel Fuel Tanks

Furnished for constructing your own multiburner Flame-Gun units, where two, four or more burners are mounted on tractor, trailer or light delivery truck. Fuel tanks of heavy welded steel for vertical or horizontal mounting, are available in 12, 15, 20 or 30 gal. capacity, completely equipped with hand



PRICE \$90.00

pump and other fittings mentioned in speci-fications of "Hercules" on Wheels. Used in conjunction with the number of burners nec-essary to obtain the required flame spread, fuel tank can be securely bolted in place and burners interconnected on a manifold or pipe frame. Prices of Hercules Burners only and fuel tanks furnished on request.

# FOR BIG JOBS USERS RECOMMEND THE HERCULES FLAME-GUN

#### REDUCES 15 DAYS' LABOR TO 1 DAY

The Hercules Flame-Gun I purchased this spring is the most practical tool for cleaning irrigating ditches, as the ditches are always ready for irrigating and the ground gets hardened so the water travels much better and it kills all growth in the ditches. I cleaned in one day with the Gun this season what it took 15 days last year, besides leaving the ditches all torn up by grubbing the grass and weeds, had the trouble of hauling the trash away.

R. E. Turner, Round Mountain, Nev.

#### KEEPS 3½ MILES OF ROADWAY TRIM AND NEAT

On the eighth day of July of this year I mailed your house a check for the Hercules Flame-Gun. I wish to state right here before it's forgotten, that you nor anyone else could buy this machine at any price. I think so much of it that money would not interest me. We have in our Cemetery three and one-half miles of roadway. We have many beautiful trees, Oak, Elm, Maple, Ash, Hickory, Walnut and Evergreens. These trees of course make many leaves, we are now raking them in the roadways and burning. Heretofore it's been impossible to burn them at times, on account of being moist, but now with the Flame-Gun how we can make them burn. Another advantage, we spread them over the road and if any weeds, grass or foul seed, this will destroy any future growth.

We have burned stumps, brush, grass, weeds, and most anything. We are now looking forward to using the Flame-Gun this winter, in melting the snow off the lots when we have to dig a grave for a funeral; we can also thaw the ground which many times is frozen a foot or more deep.

—A. P. Behr, Supt., The Oberlin Cemetery Ass'n, Oberlin, Ohio.

### CHEAPEST METHOD FOR IRRIGATING DITCHES

The Hercules Flame-Gun which I purchased from you this season has proven very satisfactory. We use it primarily for cleaning weeds and grasses from our irrigating ditches and find it very efficient and cheaper than any other method. It is also convenient for burning weeds in fence rows and other places where it would be difficult to get at them in any other way.

Burning seems to discourage the weeds more than any other method of control.

S. M. Colby, Yuma, Arizona

#### FINDS MANY USES FOR HERCULES

We have used the Hercules Flame-Gun on Ditches mostly. On weeds that are dried in the fall it can't be beat. This last fall we set the burner on the truck with one man holding it and another driving the truck. We drove 5 miles an hour along both sides of the ditches and it sure cleaned them up. But you take green weeds just when they are starting in the Spring. It will do just as good a job as shoveling a ditch if not a little better. We have used this burner to clean up the chicken yards also. It also makes an awful good blow torch for frozen pipes in Winter.

B. F. Shader, Ft. Collins, Colo.

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### MOST EFFECTIVE FOR BRUSH, RAMBLERS AND HONEYSUCKLE

I used this Hercules Flame-Gun on my farm located at Warrenton, Virginia. I have burned out hedges along the fence rows and brooks and roadsides which are completely overgrown with brush, brambles, honeysuckle, etc. and I found it most effective. In some places it would have been impossible to kill it out any other way and this gun did the work beautifully.

We had no difficulty whatever with its operation and found it much more economical and it did a better job than attempting to do it with scythes. I intend to go over this either this Winter or early Spring when the weather is suitable and burn up all the dead brush which was not killed but burned by the Flame-Gun.

I found this exceptionally effective around the brooks running through the various fields which were being clogged up by small undergrowth, brambles, etc. H. M. Lake, The Pulp and Paper Trading Co., 21 East 40th St., New York, N. Y.

Tackling a Tough Cleaning Job with two "Hercules" Flame-Guns.



# HAUCK "Vulcan Junior" FLAME-GUN

# For Small or Limited Requirements Where Larger Flame Volume Is Not Needed.

Produces Clean, Intense Flame of 2000° F.—Always Under Control.

#### Reddish Blue FLAT Flame Spreads 4" Wide by 10" Long

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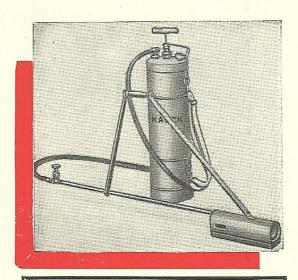
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etc.

The widespread use of the popular "Vulcan" and "Vulcan Glider" Flame-Guns described on pages 6 and 7 is the reason for making this "Junior" size "Vulcan." It is recommended for small and limited weed burning requirements—a conveniently portable model for "spot burning" in the eradication of crabgrass from lawns, burning weeds from between cracks on sidewalks, burning dodder out of lespedeza, etc.



#### 10 DAYS TRIAL

Order a Hauck Flame-Gun on 10 Days Trial. If not satisfied in every way, return it at our expense.

The "Vulcan Junior" Flame-Gun consists of a 2-gallon capacity, all-welded steel tank (not riveted or soldered), tested at 100 lbs. pressure, fitted with handle, quick acting, long stroke pump, which does not have to be removed when filling tank because a "hand-tite" filling plug (requiring no wrenches) is provided; 60 lbs. pressure gauge; 6-ft. length of oil resisting hose with brass couplings and fully enclosed steel coil Hauck patented Flat Flame Burner with windshield, backplate and removable pan, fitted with bronze regulating valve and carrying handle. Overall length of burner 36". Average fuel consumption 3/4 gallons per hour. Code Word YIBAC. Shipping weight 18 lbs.

F.O.B. Brooklyn, N. Y.

**PRICE \$16.50** 

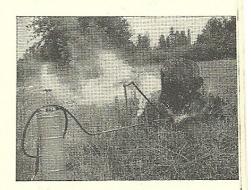
I have received the Vulcan Junior Flame Gun and am very much pleased with it. I found the tank to be of heavier and better construction than some other makes I have seen just recently and it gives good results in every way. The separate filler plug is a fine thing, I can recommend it very highly.

A. R. Kramer, American Falls, Idaho

I came across many different makes, but none seems to give as much satisfaction as what the Hauck burner can do. Give me Hauck's. I will challenge anyone. Give me Hauck, nothing else.

H. I. Tokunaga, Honolulu, Hawaii

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Burning a Tree Stump with a "Vulcan Junior" Flame-Gun.

# Thousands of Satisfied Users Testify that the FLAME-GUN is

# QUICK • SURE • SAFE • CHEAPER HANDIER • EASIER • MORE PRACTICAL ANY DAY • IN ANY SEASON

# DESTROYED POISON OAK, BURNED STUMPS AND DODDER

The Vulcan Flame-Gun purchased from you last spring is an altogether satisfactory piece of equipment. It is well made and gave no trouble whatever in operation. It was used for destroying poison oak, burning stumps, and clearing ditches, but mostly for burning dodder in lespedeza fields. It is without doubt the quickest and most satisfactory method of destroying this troublesome parasite and I really do not see how the job could be done at all satisfactorily without it. I gladly recommend it as meeting the claims made for it. Alfred S. Brand, Culpepper, Virginia

#### GLIDER VERY EFFICIENT

The Glider Flame-Gun has proved very efficient for burning crabgrass, poison ivy and scrub oak. The wide flat flame in front covers a remarkable large area in short time, and the glider type tank follows on behind without effort from the operator. Arthur H. Steinhaus, Medford Sta., L.I.

# FINDS FLAME-GUN BOTH PRACTICAL AND ECONONICAL

The Hauck Little Giant Flame-Gun bought of you in April has given very satisfactory service. It is used for cleaning irrigation ditches on my farm. Before getting the burner, all ditches were cleared with hoes, but now the hoe has been discarded for this work. A ditch cleaned with a hoe gets larger all the time—is much more expensive to maintain; besides the hoe kills no grass seeds. Other types of weed burners have been tried but discarded because they were neither practical nor economical —yours is both.

# VOLUNTEER FIRE DEPARTMENT USES IT EXTENSIVELY

W. A. Knapp, Blamorhea, Texas

Of all the equipment owned by the Crawford Volunteer Fire Department, I do not believe there was any one piece used more this past summer than the Hauck Little Giant Flame-Gun purchased from you last spring. This gun was used a lot around town in burning weeds around fences, buildings and out-of-the-way places. In other words we used fire to remove fire

hazards. This gun was used a great deal in the cemetery, around stones, markers and fences.

Out in this country we have a weed which runs close to the ground and along in the fall forms a very sharp pointed pod. This very nearly ruins a playground for children. We were able to control this weed the past summer through the use of the flame gun. All the way around we are well pleased.

G. E. Hagen, Sec. Crawford Fire Dept.,

G. E. Hagen, Sec. Crawford Fire Dept., Crawford, Neb. War

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#### CUTS COST OF WEED REMOVAL 50%

We are well satisfied with the Flame-Gun; in fact, we are better satisfied than we had expected. We found that it cut the cost of removing weeds, principally Bermuda grass, from rock and oil pavement about 50% over what we had experienced in having the grass cut out by hand with a pick. Also, we found that it took practically no patching of the pavement afterwards, which is always the case in digging out the grass, as the heat from the burner, if not applied too long at one place and time, would weld the rock and oil together after burning off the weeds and seal the pavement even better than before, giving less opportunity for the grass to grow back. We also found the Flame-Gun very satisfactory indeed in removing the weeds from the joints in cement pavement and sidewalks. If care was taken not to hold the heat too long against the cement, so that it did not crack, the weeds were removed more satisfactorily and with less damage to the cement than when dug out.

> Otto N. Rugen, Street Supt., City of Alhambra, California

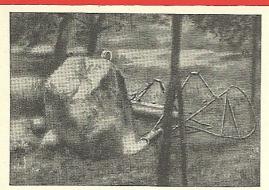
# A FEW CENTS FOR KEROSENE REPLACES BACK BREAKING JOB

As Superintendent and Sexton for The Williston Cemetery Co., am sorry that I did not learn of your Vulcan Flame-Gun sooner, as it always was a back-breaking job to clip all the grass away from around all Tombstones and Markers for every time mowing was done.

Last spring I bought one of your Flame-Guns for this purpose and now what a cinch it is to do this work, so easy.

F. O. Krouse, Williston, Ohio

# The Flame-Gun Saves Back-Breaking Drudgery · Trouble · Worry · Time



"Giant Glider" Flame-Gun Heating a Large Boulder.

#### SCHOOL FINDS MANY USES

We are quite pleased with this Flame-Gun and use it for a great many operations here at the school. Some of them are burning Bermuda Grass from ball diamond, burning under the cyclone athletic fence, curb edging, reconditioning soil in the project chicken runs, and in many other places where a hot fire is needed.

Delano Joint Union H. S., Delano, Calif.

### A BOON TO GLADIOLUS GROWERS ELIMINATING ALL WEEDING PROBLEMS

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I have used your Hauck Little Giant Flame-Gun and found it to be a remarkable and invaluable piece of equipment for any gardener or nurseryman or anyone who has weeds to contend with.

It is a boon to gladiolus growers and if properly used will eliminate positively all weeding problems as it can be used to destroy all surface weed seeds after the bulbs are planted. I used this equipment to destroy a very contrary patch of quack grass and accomplished a complete elimination after three periodical burnings.

I would not hesitate to recommend this product very strongly to anyone and trust this is a means of causing more people to know and use this fine labor-saving device. It is certainly a fine thing to own.

C. G. Young, National Gladiolus Society, Oshkosh, Wisconsin

### PROVED VERY SATISFACTORY IN PECAN GROVE

The Hauck Little Giant Flame-Gun purchased from you last year has proved very satisfactory and I use it a great deal for burning fence rows, brush and leaves around my Pecan Grove.

H. D. Youngman, Baxter Springs, Kan.

# SUCCESSFULLY CONTROLS WEEDS ALONG FENCES AND IN GUTTERS

We have used the Little Giant Flame-Gun



An hour later—Boulder Split into Small Rocks.

quite successfully in the controlling of weeds along fences and in some cobblestone gutters where it was extremely tedious and difficult to control weeds by hoeing. We have also found the gun quite useful in helping us apply tar coatings to several large manure pits. So far it has given us very satisfactory service.

Professor of Field Husbandry Agricultural College, Canada (Name & Address on request)

#### A GREAT LABOR SAVER

The Hauck Vulcan Flame-Gun which you sold me last spring has been used on jobs during the past summer such as burning off rough grass, cracking of large stones, etc. and was found very satisfactory in every way. It is a great labor saver and does a real job in a remarkably short time. I would not hesitate to recommend this gun to anyone who may have use for an all around tool for estate and farm work

P. R. Francis, G. C. Francis Chevrolet, Inc., 771 Lyons Ave., Irvington, N. J.

#### FLAME-GUN A GODSEND TO FLORISTS

In reply to your letter of December 28th, asking our opinion of your Flame-Gun would say that I consider it a Godsend to florists. For use under greenhouse benches it is ideal — destroying weeds which are perfect breeding places for insects that infest the crops within the houses, not to mention its effectiveness in combatting sow bugs, slugs, millepeds and numerous other pests, which if not eradicated take a heavy toll from the destruction they cause in greenhouses. No florist or Nurseryman should be without one of your Flame-Guns.

Arthur H. Bopp, Cumberland, Maryland

# THE ONLY SATISFACTORY WAY TO CONTROL CRAB GRASS

As you know, crab grass is one of the worst pests that cemeteries and keepers of large lawns have to contend with. I have contended with it for twelve years and I have found that scorching with Hauck Flame Guns is the only satisfactory way to control it. Chemicals kill all of the grass—digging it up is slow, and gets only part of the weeds and crab grass. Hauck Flame Guns get all of the weeds and crab grass, but do not destroy the lawn grasses.

Westover Memorial Park Augusta, Ga.

#### TRULY VERSATILE

Your Vulcan Flame-Gun has proven satisfactory in every way.

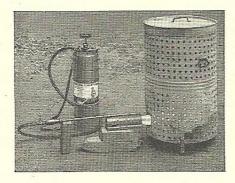
It has been used for burning weeds, both green and dry, also for heat when in a hurry to cook food, and at times when we did not care to get too much heat in the station food house, just light the gun and shove it in the fireplace under food cooker and the job was quickly and well done. It was quite a lot of pleasure to use it on the thistles on the reservation just before they were to bloom and spread their seeds.

Supt., Bureau of Fisheries (Name and address upon request)

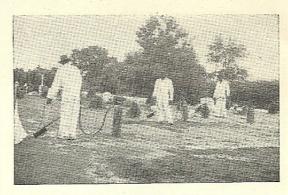
# FOR GOLF COURSE, RAILROAD TRACKS AND TENNIS COURTS

The Vulcan Flame-Gun performed very satisfactorily for us during the past season. We used it mostly for burning weeds along the edge of our golf course and near the railroad tracks and tennis courts.

W. F. Houser, Supt., Campion College, Prairie du Chein, Wisconsin



Incinerating Garbage with a "Vulcan" Flame-Gun.



Burning Crab Grass and Weeds in Cemetery Lawn with "Hercules," "Vulcan" and "Vulcan Junior" Flame-Guns.

### REDUCED DITCH CLEANING FROM \$70 TO LESS THAN \$10

Wish to state we are more than pleased with results obtained from the use of the Vulcan Flame-Gun. There is quite a large drainage ditch that runs through some very valuable property that we own in Fort Smith. It has always been an expense during the dry season for us to keep the grass and weeds from growing in this ditch. We estimate the year before we purchased this Flame-Gun from you, that the expense of keeping this ditch clean was about \$70.00 per year. We have succeeded in keeping it clean the past year with the use of your Flame-Gun at an expense of less than \$10.00. Our land has never been free of weeds. I refer especially to a railroad right of way that runs par-allel with our land which has an excess amount of weeds along our fence. One of the best results obtained by your Flame-Gun is that it has permitted us to kill weeds before they go to seed.

Arthur G. Lee, Ft. Smith, Ark.

# DOES WORK OF FIVE MEN ELIMINATING DODDER

We have given the Vulcan Burner a rather complete test—last Fall on Dodder, and this past Spring and Summer on other types of weeds. I find it one of the most satisfactory methods of certain weed control. In the elimination of dodder in Legume fields it is far more effective than hand cutting, and will accomplish as much as would five men working at cutting out and removing the infested areas, in the same length of time.

It also does a more thorough job than could be done by hand. We also find that it is very satisfactory for burning out hedge bindweed areas, spots of red sorrel, and poison oak, the latter in fence rows and spots of wild onion in small grain fields.

C. A. Helm, Sec'y, Mo. Corn Growers Assoc., Columbia, Missouri

#### RAISED GREENHOUSE TEMPERA-TURE IN SUDDEN COLD SNAP

Used the Vulcan Weed Burner we got from you last summer and don't see how we got along without it the past forty-two years we have been in business.

Our Rose House is 200 feet long by 36 feet wide and I can kill all the weeds in the 1200 feet of walks in less than one hour at a cost of less than ten cents for kerosene. This not only kills the weeds but all bugs making their homes on the ground under the benches. I know that the saving this affords in insecticide alone will more than pay for the burner in a course of a year.

In talking to a number of other Florists who have weed burners I find that many of them are afraid to use them in the Greenhouse. However, I find that by going down each walk twice and shooting the burner under the bench on each side that we do not damage any of the overhanging plants, although in Greenhouse work do not attempt to burn the weeds, merely fan them and give them a scorching.

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I also used the Weed Burner, this fall, when the temperature would drop suddenly. I merely run the Weed Burner up and down the walks and raised the temperature of that house 6 degrees, doing away with the necessity of burning a lot of coal to get up steam in a cold boiler. While I would not advise this as a steady practice it works perfectly in a case of emergency.

As you can see from the contents of above I am really sold on the Hauck Weed Burner and anyone having any questions as to its use in the Greenhouse I will be glad to give them the benefit of my experience in the interest of better and more economical Greenhouse operations.

J. N. Green, Fremont, Nebr.

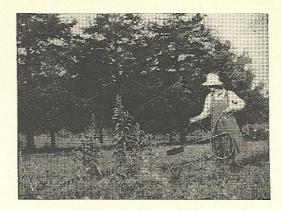
#### MELTS LEAD - REPAIRS PAVEMENT

We are very well pleased with the performance of the Hauck Flame-Gun.

We have used this gun on a number of different types of work other than burning weeds. It is a very valuable outfit in the Water-Works Department in the way of melting lead and also very serviceable in making repairs on asphaltic pavement.

We are also going to run an experiment on burning weeds in our mill pond which are very unsightly during the summer months.

City of Three Rivers
O. O. Johnson, City Manager
Three Rivers, Michigan



Killing Canadian Thistles with a "Vulcan" Flame-Gun.

# ALL OF THEM "CLICK" BECAUSE OF FLAME-GUN SERVICE

I am a suburbanite and own a few acres of land. I have a garden, a small orchard, a flock of hens and a kennel of pedigreed dogs—Springer Spaniels. None of these would "click" as they do were it not for the efficient service the little Flame-Gun renders in the destruction of pests, noxious weeds, tent caterpillars, chicken mites and fleas and lice in the kennels. I practice dentistry for a living, and breed "man's best friend" as a hobby.

Rockpile Kennels Shelby, N. C.

### SAVES MANY DOLLARS ON POULTRY HOUSES

I am glad to state the Hauck Flame-Gun is the best I have used, all you have stated about it is true. I use it mostly in my poultry houses. It saves me many dollars for spraying materials and does a much better job. Its long hot flame will kill any kind of disease germs. I also dry my floors when they become wet or damp. The gun itself is much better than the one I had due to its long and wide flame.

In my opinion it is just about perfect. I loaned it to a friend that had coccidiosis in his chickens and he cleaned it up in a week or ten days.

A. J. Lockard





# An Investment That Saves Time Labor and Money for Years to Come



Burning Brush with a "Hercules" Flame-Gun.

#### BEST INVESTMENT EVER MADE

In reply to your letter of November 12th regarding our experience with the Little Giant Flame-Gun, wish to say that we cannot be too high in our praise of this burner. We consider it the best investment we have made in cemetery equipment as it has proved satisfactory in every way.

Mount Olivet Cemetery Fort Worth, Texas

#### SAVES LABOR COSTS 50%

The vacant lots and walks in our cemetery were infested with Johnson Grass and various kinds of foul weeds. We gave this rank growth a preliminary spraying with the Hercules Flame-Gun, which killed it instantly. In four or five days after the sun had dried this growth we went over it the second time and burned it to ashes. We find this the most economical way to burn the weeds and grass. We think we saved at least fifty percent in labor by using this machine.

Grandview Cemetery Ass'n Grandview, Texas



Demonstrating a Hauck Flame-Gun at an Agricultural College.

#### NO MORE WEEDS THAT SEASON

I received the Hauck Flame-Gun O.K. I used it mostly on irrigation ditches. I burnt the ditches out and the weeds did not bother any more this past season. When we clean the ditches with a hoe we have a regular 10-day job.

G. A. Dutton, Sandoval, New Mexico

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#### SATISFACTORY IN EVERY WAY

I am glad to give you our recommendation for the Flame-Gun. It has proven satisfactory in every way we have used it. We anticipate using it in the spring to kill the green weeds as they start to grow. If it proves as satisfactory for that purpose as it has for all others we will be able to use more Flame-Guns.

Edwin P. Knapp, County Engineer Sharon Springs, Kansas

# SIMPLE, STURDY CONSTRUCTION ASSURES SERVICE FOR YEARS

I received your favor of 18th inst. and take pleasure, indeed, in telling you that I am very much satisfied with the performance of the Vulcan Flame-Gun bought from you some time ago.

Its simplicity of operation makes it a ready servant in my place. Kept clean, it will spring into action readily. Its simple and sturdy construction assures service for years to come. Its ease in handling and the time-saving energy of its powerful flame make one choose the "Gun" where formerly I fatigued myself with the scythe, the sickle, the rake, or hoe and brushhook. I have put it to various uses, indoors as well as outdoors, and always with success. I am ready, any time, to demonstrate your "Flame-Gun" to prospective customers of yours in any vicinity.

William Thiele, East Moriches, N. Y.

#### WORTH DOUBLE ITS COST

You may be interested to know that the Hauck Vulcan Flame-Gun purchased from you some months ago has been used quite often at my country place 23 miles out of Houston, and it has done its work well. It is used there extensively for the burning of stumps, weeds and other dense growth. The foreman at the farm states that it is worth double its cost.

Russell Brown, The Russell Brown Co. 3104 Main St., Houston, Texas

# No Job Too Big or Tough for this "One-Man" Burner Outfit

# BURNS OLD STUMPS AND POISONED TIMBER, ELIMINATES DYNAMITE

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We found your Flame-Gun extremely useful in our operations during the past season. We used this gun to burn out accumulated trash and debris along ditch banks and fence rows. We also burned dry brush and found that we could burn old stumps and poisoned timber, thus saving us considerable expense for labor and dynamite. We also used this gun to remove lint from the walls, ceiling and machinery in our cotton gin. This gun was also very handy in delousing the chicken and turkey houses. We will probably purchase another gun of this type before starting our new operations.

C. E. Haswell, Mgr., McKinney Plantations, Route 2, St. Joseph, La.

#### **EVERY GREENHOUSE SHOULD OWN ONE**

This Hercules Gun has been highly satisfactory. We use it for burning grass and weeds around the greenhouses, finding it cheaper than hand chopping. It enables us to keep the premises in nice shape, and at the same time, we feel we are getting rid of considerable insect trouble.

We also find it very handy in burning out walks, side walls, etc. of greenhouses. We really do not know what we would do without it. We feel that every greenhouse plant should own one of these guns.

A. G. Smith & Sons, Petersburg, Va.

#### DAYS OF WORK REDUCED TO HOURS

As to performance of the Hauck Vulcan Flame-Gun it is very satisfactory.

My problem was an old neglected clay tennis court. All efforts to keep weeds and a perisistent growth of moss under control was absolutely useless.

The Flame-Gun did in a few hours what it would take days to do by hand. Needless to say, I was delighted with the speed and thoroughness of the Flame-Gun. A half day a week keeps the court in good condition. My summer home is only occupied from July 1st 'til Sept. 15th so weeds get a head start but with the Flame-Gun, walks, drives and edges are soon clean and neat.

The Flame-Gun also solves the problem of garbage, weeds from the gardens and

all general rubbish. It is easily assembled, handy to use and efficient.

Nellie M. Burnett, Mapleville, R. I.

#### DOES WORK OF 4 MEN IN TRUCK GARDEN

I find that the "Vulcan Flame-Gun" gives the best service for burning weeds and brush and fence rows. I had 2 acres in truck garden and with the aid of the Vulcan was able to keep the weeds and worms and insects under control by doing several hours work a day.

I employed 4 men to hoe and pull weeds before I got the Vulcan and then my garden was not free of weeds. Now it is free. Thanks to the Vulcan and at much less cost and labor.

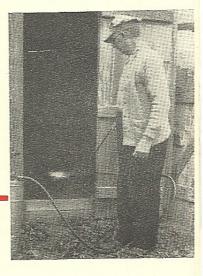
National Poultry Farm, Addison, Penna. D. B. Augustine, Proprietor

# AGRICULTURAL EXPERIMENT STATION EFFECTIVELY CONTROLS DODDER

I will say that the Vulcan Flame-Gun which I got from you last summer was used very effectively in controlling dodder on lespedeza. Lespedeza is now the main hay crop in the State. The worst enemy is dodder, which when very bad can be controlled by grazing. But when present only in spots scattered over the field, may be burnt off rapidly by means of the Flame-Gun. This is our only use of the Flame-Gun during the past year, and it proved highly satisfactory in all respects.

Director, Agricultural Experiment Station (Name and address upon request)

Disinfecting a Poultry House with a "Vulcan Junior" Flame-Gun.



# from NORTH and SOUTH— EAST and WEST

# Come More Testimonials like These about HAUCK FLAME-GUNS

# BURNS JAPANESE HONEYSUCKLE AND BREAKS LARGE STONES

In reply to yours of the 18th would say that we are entirely satisfied with the performance of the Hauck Flame-Gun purchased from you. We have used it successfully in burning out areas badly grown up with Japanese honeysuckle and also for breaking up large stones.

W. H. Pfeiffer, Business Sec'y Pennsylvania State College Dept. of Forestry Mont Alto, Penna.

#### **DESTROYS FUNGUS, INSECT PESTS**

The Vulcan Flame-Gun purchased from you has proved very satisfactory in keeping down weeds and grass growing in the aisles and under the greenhouse benches, at the same time destroying fungus and insect pests at a saving of both time and labor.

Leslie Greenhouses, Detroit, Michigan

### CLEARS WEEDS, YOUNG LOCUST TREES, BLACKBERRY BUSHES & HONEYSUCKLE

The Vulcan Flame-Gun purchased from you last summer is fine, a great labor saving machine. I am in the greenhouse business, I make a specialty of pot plants in the spring, in the summer I do not use the houses, therefore weeds of all descriptions and kind grow under the benches. It is necessary in the fall to clean those weeds out so it is down on your knees and pull them out by hand that is the reason I purchased the oil burner and I am not sorry I bought it, it has saved me a back breaking job. I was showing it to a friend of mine and he offered me a job to burn off an old apple orchard that had not been mowed off for three years. It had grown up with every kind of weed imaginable, young locust trees, blackberry bushes and to top it off about two feet thick with honeysuckle. It was some mess but I cleaned it.

Geo. B. Morrell, Torresdale, Penna.

### FOR WEED AND WILLOW BURNING HEATING IRON AS BLOW TORCH

The Flame-Gun purchased from your company, some time ago, was ordered for the Crompton Bros. It has given very satisfactory service and has been put to many uses.

It has been used for weed burning, willow burning, for heating iron and used as a blow torch.

The Crompton Bros. consider this gun economical, and very useful. The degree of heat obtainable from this gun has a very killing quality.

I shall contact the Crompton Bros. and have them send their opinion to you.

County Agricultural Agent (Name and address upon request)

### AROUND SECTION HOUSE FENCES AND YARDS

Concerning the performance of the Vulcan Flame-Gun I recently purchased from you, beg to advise that it is satisfactory in every respect.

I use it burning grass and weeds on the railroad and around the section house fences and yards.

J. E. Young, Section Foreman, Atlantic Coast Line R.R., Lakeland, Florida

# KILLS GRASSHOPPERS, STERILIZES SOIL IN GREENHOUSE

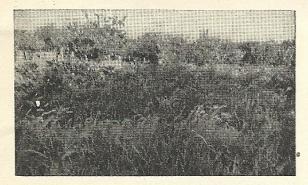
We believe the Vulcan Flame-Gun we ordered from you this year has already paid for itself.

We have found it especially valuable in killing grasshoppers in the adult stage before egg laying time. This we found easy to do in the mornings when they were all up on top of the weeds along the fence lines and roadside. We also used it to a very good advantage in heating water for soil sterilization in the greenhouse.

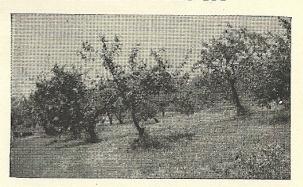
F. T. Darling, Owner, Norfolk Floral Co., Norfolk, Nebraska

# Here Are Some Examples of Before and After Treatment with a HAUCK FLAME-GUN

#### CLEARING ORCHARD AND BERRY PATCH



Orchard and Berry Patch before using the "Little Giant" Flame-Gun.

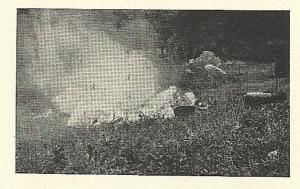


Orchard and Berry Patch after using the "Little Giant" Flame-Gun.

#### BREAKING UP LARGE BOULDER



After 6 minutes the "Giant Glider" Flame-Gun cracked this three-ton boulder in two, eliminating the need for two men, sledge hammers, striking drill, crowbars and wedges.

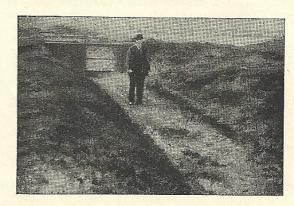


In at the finish after 15 minutes—the Flame-Gun has already broken the boulder into pieces one man can easily handle.

### CLEANING OUT AN IRRIGATION DITCH



BEFORE BURNING-Heavy, Rank Growth.



AFTER BURNING—Clean, Serviceable Ditch.

# To Do All These Jobs Better

IT TAKES A

# FLAME GUN

BURNING WEEDS — Everywhere — from Roads, Streets, Sidewalks, Driveways, Gutters, Canals, Irrigation Ditches, Culverts, Stone Walls, Fences, Parks and Cemeteries, Golf Courses, Playgrounds, Tennis Courts, Vacant Lots, Railroads, Rock Gardens, Seed Beds, etc.

stems, roots, seed and all annual, biennial and perennial, no matter how troublesome, such as Canada Thistle, Chickweed, Wild Morning Glory, Quack Grass, Witch Grass, Bermuda Grass, Red Sorrell, Dandelion, Peppergrass, Fanweed, Bindweed, Purslane, Teabrush, Leafy Spurge, Poison Ivy, Poison Oak, Poison Sumac, Bittersweet, Wild Mustard, Wild Radish, Burr Docks, Sassafras, Honeysuckle, trailing vines, tangled hedges and other weeds, sprouts, brush, etc.

BURNING GRASS AND WEEDS a round fruit trees and other trees to eliminate mice runs and nests. Orchard sanitation emphasized as a big factor in the control of the coddling moth, vermin and the general run of insect pests can be rigidly practiced by scraping off rough bark of trees that harbor pupae after which the debris is cleared up and burned and the orchard floor kept clean by burning over.

**PREPARING SEED BEDS IN FRAMES** — a slow torching over prepared beds kills weeds and seeds near surface. If beds can be prepared a week in advance of seeding, the weed seeds will sprout and a torching kills young weed seedlings readily.

**BRUSH AND SLASH**—can be readily ignited while green or damp and burned early in the morning when the ground is wet with dew or after a rain, avoiding possibility of a running grass fire.

BACKFIRING—to control forest fires. One man with a Hauck Flame-Gun can set 15 or 20 times as many backfires in a given period of time as could be set with a wick torch, brands, etc. and confine the flames before they get beyond control. Used by U. S. Forest Service, State Forestry Depts., Resettlement Administrations, National Park Service, U. S. D. A., etc.

**STRIP BURNING**—to make a fire-guard, advisable in burning dry growth. Early in morning when growth is wet with dew or after a rain, burn a clean lane about 6 ft. wide around field or patch over which a fire cannot cross.

**MEXICAN BEAN BEETLES**—burn bean vines soon as the last picking is made. This not only kills the Mexican bean beetles but also the beetle eggs and sterilizes the soil.

**BURNING TREE STUMPS**—to clear off cutover land.

**BURNING AROUND MONUMENTS**—in cemeteries, parks, etc. without discoloring white rock or blackening granite.

BURNING THORNS—off cactus pears by quick singeing to remove spines which converts them into desirable live stock feed.

**PROTECTING CATTLE**— against poisonous weeds and growth on the grazing range.

**ELIMINATING GRUBBING** — by burning sprouts, saplings and unwanted trees.

#### **CONTROLLING BLISTER RUST**

**EXTERMINATING MOSQUITOS** by burning over their breeding pools in ditches to prevent hatching.

DESTROYING INSECTS — Hessian Flies, Grasshoppers, Tent Caterpillars, Locusts, Mosquitos, Chinch Bugs, Ants, Fleas, Mites, Plant Lice, Army Bugs on Potato Plants, White Fringed Beetle, etc.

brooder and laying houses with the Flame-Gun. Endorsed and recommended by Experiment Stations and Agricultural Colleges as 100% effective in destroying germs of coccidiosis, B.W.D. and worm eggs or for cleaning up plague spots to reduce mortality.

**DISINFECTING** — poultry and brooder houses, dog kennels, fox pens, turkey runs, stables, dairy barns, etc.

DISINFECT TOBACCO SEED BEDS. The to-bacco bed is first burned or torched over with the Flame-Gun. Then work up the bed. When it is ready for seed torch it again. The cost of fuel is at the rate of about 1 gallon for every 100 sq. feet of bed disinfected.

**DE-LINT COTTON SEED** — Flame - Gun scorches off the lint and kills any fungus that may be on seed. Spread seeds over floor and apply Flame-Gun keeping flame in motion all the time. While applying flame keep stirring seeds with a rake.

**INCINERATING** rubbish, trash, decayed and disease-carrying vegetation, etc.

**STERILIZING** garbage cans, feeding trays, farm utensils and equipment—barrels, kegs, etc.

**CHARRING** fence posts, electric light poles, etc. prior to creosoting—prolongs life of poles.

clearing fence rows around fence posts, etc. of undesirable weed growth.

**HEATING DRINKING WATER** for livestock during cold winter months.

HEATING WATER to scald hogs.

SINGEING HOGS after scalding.

HEATING CONTAINERS — kettles, feed cookers, caldrons, water troughs, tanks, wax pots.

HEATING SOIL by running iron pipe with both ends open through hot bed. Heat from Flame-Gun travels through entire pipe length, quickly and thoroughly heating surrounding soil.

**HEATING WAX** —horticultural and bees-

BURNING CONCRETE POOL BOTTOM to prevent slipperiness.

DRYING OUT damp cellars, concrete floors, outhouses, warehouses, storerooms, shops, MELTING pitch, asphalt, tar, etc.

THAWING— farm equipment, machinery, tanks, pumps, scales, pipes, frozen ground, coal and gravel hopper cars, fire hydrants, water mains, switches, frozen culverts, etc. MELTING LEAD out of pipe joints to re-

move water mains.

MELTING BABBITT out of and preheating bearings.

PREHEATING FOR WELDING and brazing. **PREHEATING** for bending and straightening rods, bars, pipes, bent automobile frames or axles, cylinder blocks, gears, parts, etc.

SPLITTING ROCKS AND BOULDERS into small pieces by heating until red hot, then throwing on a bucket of cold water.

#### MORE PRAISE FOR

#### **BREAKS ROCKS UP TO 10 TON**

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About three years ago I purchased a Little Giant Flame-Gun. I purchased this as a weed killer but I have used it more for breaking up rocks than I have as a weed killer.

Would like you to know that it is wonderful to break up rocks. I have taken out rocks up to 10 tons with the gun and smaller ones are removed easily and quickly. I have to do most of my work alone and could not do without my Flame-Gun.

A. K. Sibley, Egypt, Massachusetts

#### PURGES GREENHOUSES AND BENCHES OF INSECTS AND WEEDS

As to the burner I could not afford to be without it in fact is one of the best insect destroyers I ever had. Very fine for burning out sashes in greenhouses where insects always hang out also when you fill benches with new soil let first crop of weeds come before planting then burn and the cost of the machine is saved in the one operation, or a bench of Minnus before throwing out have become loaded with insects burn it off. I could name a number of very useful things it can be used for. I'm most certain 50 burners alone can be sold in St. Louis County alone and I have referred to the Windler Wholesale Florist Supply Co., St. Louis, Missouri, Lasalle & Josephine St., who will handle same. They are the leading concern in St. Louis, Mo. You will hear from them very soon as I am sending in your address to them today.
Wisely - Florist, Murphysboro, Illinois

#### GOVERNMENT BUREAU FINDS IT VERY SATISFACTORY

The Flame-Gun has been used principally for burning weeds and willows on the banks of irrigation canals and drainage ditches. It is now being used to heat tar which is being used as a coating on steel pipe. It has done this work very satisfactorily.

U. S. Government Bureau (Name & Address upon request)

#### VERSATILIT



Burning Canadian Thistle and Rosebriars with "Vulcan" Flame-Gun.



Burning Bindweed with "Vulcan Junior' Flame-Gun.



At work on State Highway with a Special Type of Hauck Flame-Gun.

# 3 IMPORTANT FACTS TO REMEMBER About HAUCK FLAME-GUNS

### \_JUST THE SIZE \_ YOU NEED

There is a size and type for every need. Hauck Flame-Guns are made by the largest and oldest manufacturer of oil torches and oil burning equipment for agriculture and industry. They represent the high standard of design, workmanship and performance which readily distinguishes Hauck Products from other makes.

# HAUCK — MONEY-BACK GUARANTEE

Every Hauck Flame-Gun is positively and completely guaranteed for a period of one year against defective workmanship or materials, and is guaranteed to produce the results we claim for it. If any Flame-Gun purchased from us is not satisfactory in every respect, you have the privilege of returning it within 10 days after delivery. Your money will be refunded without question.

### YOURS ON \_ 10 DAYS TRIAL

Order a Hauck Flame-Gun on 10 Days Trial. If not satisfied in every way, return at our expense. No offer can be fairer than that.

#### JUST TRY IT-YOU LL BUY IT

# HAUCK MANUFACTURING CO.

Established 1900

124-136 TENTH STREET

BROOKLYN 15, N. Y.

BRANCH OFFICES AND WAREHOUSES

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625 THIRD STREET SAN FRANCISCO 7, CALIF.