



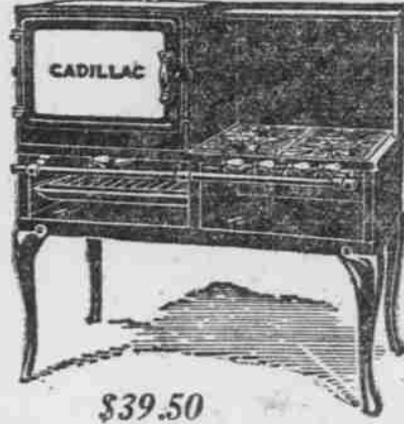
Festival Visitors Are Cordially Invited to Inspect this Up-to-Date Furniture Store

# The June Bride Will Be Delighted

to find her home furnishing so simple and inexpensive, as a trip through this store of beautiful furniture will prove. Powers' Easy Credit makes it easy to start home-keeping with furniture all your own.

The Saying Goes: "Feed a Man Well and His Love Will Be True"—So

## Here's a Splendid New A-B Cadillac



\$39.50  
Use Your Credit

### Gas Range at \$39.50

—though it was made to sell at \$52. It makes good cooking so simple that it's a gem at any price. Four burners, with a big 16x20 elevated oven, finished all in black enamel, except for the white panel doors. The clean-out tray and the broiler are white porcelain, so easy to keep clean and bright-looking. Another point about this range—the oven is interchangeable from right to left, to adjust to the exact way you prefer it.

Own  
Your  
Home

### Oregon Products Week

At Powers  
June 9 to 14

In our windows  
are installed three  
**WORKING  
EXHIBITS**

which show the  
manufacture of  
**OREGON-  
MADE  
FURNITURE**

Bring your out-of-  
town guests to see  
these exhibits.

Doerbecher Manufacturing  
Co., 3d st. window.

Portland Furniture Manu-  
facturing Co., Yamhill st. win-  
dow.

Willow Craft Furniture Co.,  
Yamhill st. window.

—All Week—

### TRUNKS, BAGS, SUITCASES

Get your vacation luggage now  
and have it ready when you want it  
for a week-end. Powers' has a wide  
selection.

No Home Is Complete Without Music

\$10 Cash and \$2 a Week

Buys This Fine \$100 Powers'

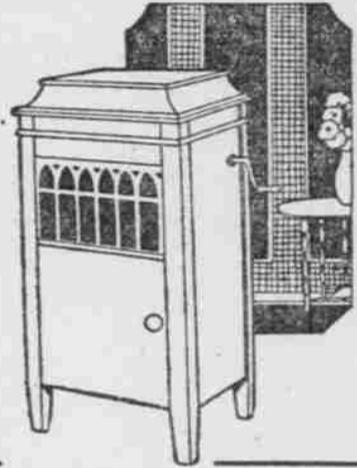
### Brunswick Outfit

Plays All Makes of Records With a Tone  
Reproduction That Is Superb.

This Special June Offer Consists of

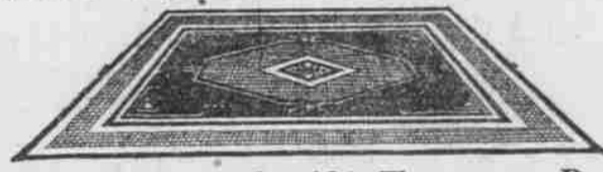
No. 7 Brunswick, either oak or mahogany.  
Five 10-inch double-faced records (10 selections).  
A one hundred record album.  
Our record cleaner.

Use Your Credit; It's Good at Powers



YOU MUST SEE THIS NOTABLE SHOWING OF POWERS'

### Rugs



This is an excellent time to choose a new rug,  
for we have so many fine new ones in all the pop-  
ular kinds and patterns. USE YOUR CREDIT and  
choose while you have this opportunity.

Room-Size (9x12) Tapestry Brussels Rug, Special.....\$25.65  
9x12 Axminsters, spe- \$31.85 | 9x12 Grass Rugs, so- \$16.00 | 27x54 Axminsters, spe- \$4.85  
cial at..... cool looking, special at.....

### Keep the Baby Happy and Healthy

The New Reed

### Sulkies

Have Come



They are well made,  
comfortable and yet cool  
and light; the designs are  
the very latest. Your choice  
in ivory, brown or gray,  
with or without a hood.

### Dining - Room Pieces

Oak Diner \$4.30

It is a good looking chair,  
with a full slip-seat. The  
usual price is \$5.50, but we  
offer it now for only \$4.30.

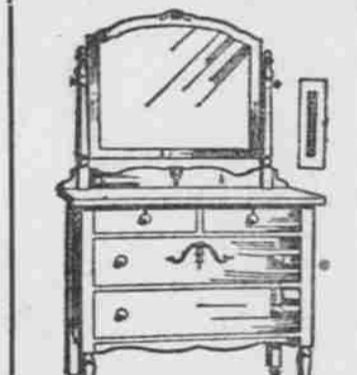
Solid Oak Dining  
Table \$31.25

A round table, nicely fin-  
ished, with five-pedestal base.  
A charming model for the  
modest dining-room. The usual  
price is \$37.75.

### Warm Days Demand the Comfort of a Fine

### Porch Settee

We have them in either red or  
natural finish, special.....\$1.89  
Four-foot Porch Settee spe- \$6.50  
cial at.....  
Four-foot Rocker Settee \$7.25  
special at.....  
Four-foot Oak Porch Swing \$5.45  
special at.....



Extra Good Values  
This Week in

### Period Dressers

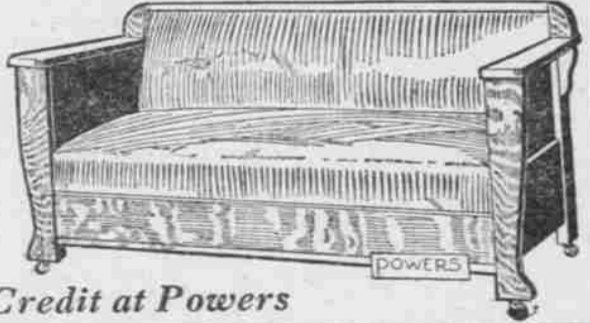
Ivory Finish

\$36.75 value \$29.25  
\$34.50 value \$29.25  
at.....

### This Attractive Quartered Oak Bed Davenport

\$52.75

A plain, substantial  
design, upholstered  
in Spanish leather-  
ette, with comfort-  
able cushioned seat  
and back. A very  
convenient piece of  
furniture to have.



—Use Your Credit at Powers

### You Can't Afford to Be Without a

### Hoosier Cabinet

It is a necessity. Any housewife can  
buy one here on easy credit terms. It  
saves steps and space. Come in and  
see them.

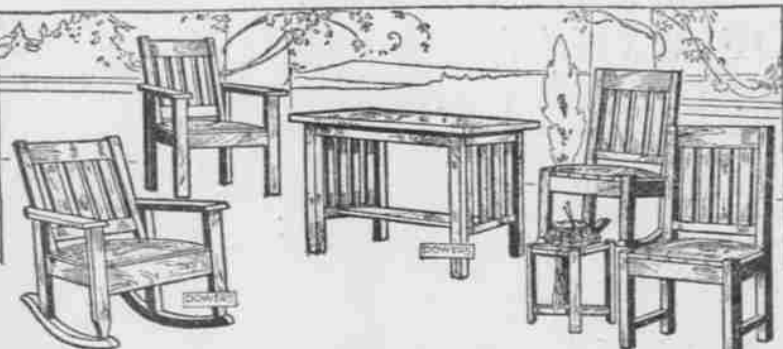
### It's Refrigerator Time

You Can't Find a Better

Refrigerator Than a

Leonard Cleanable

with its convenient shelf arrangement, and its one-piece porcelain lining.  
Use Your Credit.



### 6-Piece Solid Oak Set \$29.90

You can see what a well-built set this is. It will give satisfaction  
in the living-room or for your porch sitting-room. The set consists of  
library table, arm chair, arm rocker, side chair, side rocker, and a  
dainty little fern stand. Spanish leatherette covers the chair and  
rocker seats.

### "Sterling" Rotary Sewing Machines

Reduced to Sell at Only

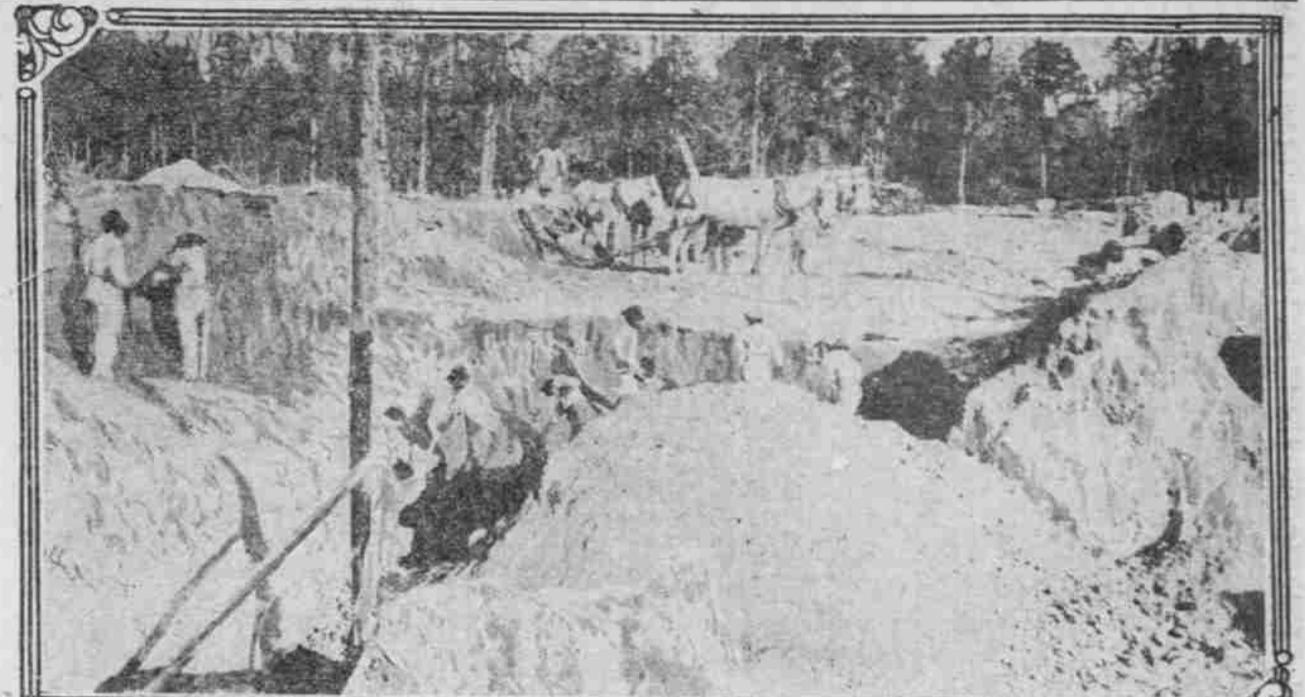
\$49.75

This is a standard sewing machine, manufactured by the National  
Sewing Machine Company. It is light running, and will give very  
good service. Its regular price is \$56.50.

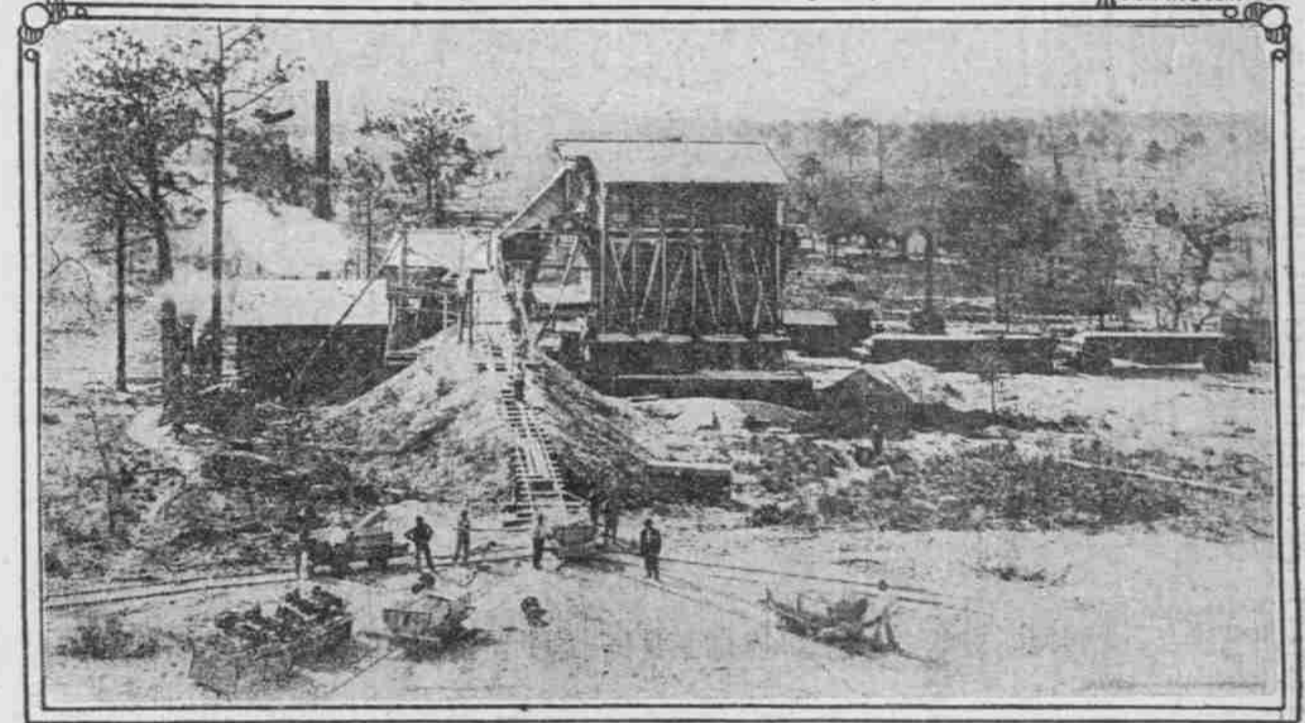


## WORLD'S GREATEST PHOSPHATE MINES LIE CLOSE TO SURFACE IN THE STATE OF FLORIDA

Government Figures Show Tampa Deposits Contain 52 Per Cent of Entire World's Supply of Valuable Rock and  
80 Per Cent of the Supply of the United States.



Negro Miners Working in A Florida Phosphate Pit.



How Phosphate Rock When Mined is Conveyed To The Crusher, Washer and Storage Bin.

TAKE account of stock is now one  
of the principal and vital occu-  
pations of the entire world. On  
every hand, in every land, merchants  
and manufacturers are preparing or  
the after-the-war demands for their  
goods of the reconstruction period.

Back of this, by governments them-  
selves, comes the figuring on the nat-  
ural resources of the country under their  
jurisdiction. This is only natural, as  
largely upon these resources the con-  
tinued prosperity of any nation funda-  
mentally rests. The country which has  
something to sell, which all nations  
require, but which they do not carry,  
if at all, possess, of course has a trade  
advantage.

Restrictions on international com-  
merce during the war naturally threw  
every nation on its own resources to a  
very great extent, and focused at-  
tention on these resources considerably  
more than was necessary times of  
peace. In this country some very in-  
teresting "discoveries" were made when  
we came to the stocktaking of our na-  
tional resources. Discoveries which  
were in more than one case of a sur-  
prising nature.

Take one of those which may be said  
to have been made in Florida. Every-  
one, of course, is aware that this far  
southern state produces most of the  
fresh vegetables utilized in the north-  
ern and eastern states during the win-  
ter and early spring months. In brief,  
the agricultural richness due to the  
soil and climate of Florida is well  
known. We have also come to look  
upon the country discovered by Ponce  
de Leon, in search of the fountain  
of perpetual youth, as the great restor-  
er of the "youth" of the nation today  
and as our great winter playground,  
where thousands of Americans go an-  
nually during the frozen period to es-  
cape the climatic rigors of the north,  
and to bask in the balmy air and sun-  
shine and to forget the cares of winter  
and every-day existence, but few Amer-  
icans have ever looked upon Florida as  
a mining state of importance. Thus  
to many it will come as a surprise to  
learn that in one mining product, phos-  
phate, Florida today produces about 52  
per cent of the entire world's supply  
and about 80 per cent of the supply of  
the United States, and the war has  
shown that this is an exceedingly im-  
portant and valuable product of great  
value in both times of war and times of  
peace. Incidentally these phosphate  
beds, underlying to a greater or less  
extent almost the entire surface of  
the state, are one of the great reasons  
for the wonderful productivity of Flor-  
ida soil.

War Starts Development.  
Although, of course, they have been  
known to some and worked for years,  
it was not until 1917 that Uncle Sam  
really turned his attention seriously  
to the Florida mines as one of his great  
natural assets.

At that time a very general effort  
was being made to increase the pro-  
duction of phosphate rock, owing to  
the conviction that the people of the  
United States must greatly increase  
their production of foodstuffs. Be-  
sides supplying food for ourselves, we  
were more and more importantly re-  
quired to make large shipments to  
our allies, and at the close of the year  
it was apparent that even greater ef-  
fort must be made to add to the supply  
of food required for shipment abroad.  
But there was a tremendous diffi-  
culty in the way which every practical  
farmer in the United States realized,  
namely, the shortage of fertilizer, as  
a great increase in the production of  
foodstuffs or intensive agriculture im-  
plies a much greater use of fertilizer,  
and this fertilizer meant a more  
energetic mining of phosphate rock. It  
was then that the eyes of all those fa-  
miliar with Florida's surprising rich-  
ness in this particular, were turned  
toward that state and, despite many

handicaps due to the war and the con-  
sequent shortage of ships, railroad cars,  
congestion of freight and scarcity of  
labor, Florida phosphate miners did  
their bit to help out and relieve the  
situation.

Most everyone is familiar with the  
slogan, "Tampa, without a chimney,  
makes the world world smoke" due to  
the fact that the south Florida city has  
for years maintained the world's lead  
in the manufacture of "clear Havana"  
cigars, but mighty few people, however,  
know that in the vicinity of Tampa  
there is in the ground and yet to be  
mined the greatest and richest beds of  
phosphate to be found in the entire  
world.

Fort Facilities Increased.  
To keep our farmers supplied with  
their badly needed fertilizers, the war  
quickly gave Tampa the distinction,  
which she is likely to hold indefinitely,  
of being the largest shipper of phos-  
phate rock in the world. The docks at  
the port of Tampa were developed  
until they are now the finest in the  
world for the loading of this product,  
and the port has the distinction of hav-  
ing the world's fastest phosphate-  
loading elevator. It is possible for  
over 1,000,000 tons of phosphate a year  
to be shipped from Tampa in full  
cargo and depart in the same day.

With her present facilities Tampa can  
ship through her port alone something  
over 1,000,000 tons of phosphate a year,  
and the port has the distinction of hav-  
ing the world's fastest phosphate-  
loading elevator. It is possible for  
over 1,000,000 tons of phosphate a year  
to be shipped from Tampa in full  
cargo and depart in the same day.  
The war broke out the government com-  
manded some of these mines, but  
when the importance of the phosphate  
industry to the government and to our  
farmers was pointed out, the boats  
were allowed to continue in the trade.  
In normal times most of the rock is  
carried to the markets of the world by  
boat because of the cheaper rate than  
by rail, and a number of boats are en-  
gaged regularly in this traffic. When  
the war broke out the government com-  
manded some of these mines, but  
when the importance of the phosphate  
industry to the government and to our  
farmers was pointed out, the boats  
were allowed to continue in the trade.  
In normal times most of the rock is  
carried to the markets of the world by  
boat because of the cheaper rate than  
by rail, and a number of boats are en-  
gaged regularly in this traffic. When  
the war broke out the government com-  
manded some of these mines, but  
when the importance of the phosphate  
industry to the government and to our  
farmers was pointed out, the boats  
were allowed to continue in the trade.

Immense Importance Evident.  
The war quickly made evident not  
only the immense importance of our  
Florida phosphate mines for the pro-  
duction of fertilizer for intensive agri-  
culture, but also the inestimable value  
of the products of these mines for mil-  
itary purposes. Everyone knows the  
importance of phosphorus in the mak-  
ing of explosives and war munitions.  
Now a charge of phosphate rock, coke  
and sand, upon being heated in an elec-  
tric furnace, yields about 16 per cent  
of crude phosphorus. This crude phos-  
phorus is purified by filtration through  
porous tile, chamotte-skin or canvas,  
the operation being carried on under  
warm water, which keeps the phos-  
phorus liquid.

Phosphorus is usually marketed in  
the form of sticks, which are made  
by conducting the phosphorus from the  
melting pot through a pipe surrounded  
by water. It solidifies in the pipe and  
can be removed as a continuous rod.  
Perfectly pure phosphorus is a white,  
transparent, waxy solid, but commer-  
cial phosphorus is generally yellowish  
owing to its content of allotropic red  
phosphorus. Almost every time we  
strike a match to light a fire, the gas or  
a smoke, we burn some red phosphorus  
as it is employed very extensively in  
the manufacture of matches. It is usu-  
ally made by heating yellow phosphorus  
in iron pots provided with air-tight  
lids, which, however, bear a long pipe  
open to the air. A small quantity of  
the phosphorus combines with the oxy-  
gen in the vessel, and the operation is  
then practically conducted in an at-  
mosphere of nitrogen, which affords  
additional safety from explosion. The  
product is ground under water and any

unchanged yellow phosphorus it may  
contain is eliminated by boiling it with  
caustic soda. The product is then  
washed and dried and finally packed in  
tin boxes.

Medicinal Preparations Many.  
But this is by no means the whole  
story of the importance of the Florida  
phosphate mines, as there are various  
valuable medicinal preparations of  
phosphorus. Owing to its remarkable  
influence on the growth of bone in  
young animals, it has been used in the  
treatment of rickets and osteomalacia.  
Its most effective use, however, is as  
a nerve tonic in paralysis agitans, loco-  
motor ataxia, impotence, and nervous  
exhaustion. It is also a remedy for  
some skin diseases. The hypophosphites  
have been recommended as a remedy  
for pulmonary affections, in which  
they are said to act as free phosphorus  
without being irritant, and the glycer-  
ophosphates are useful to stimulate  
metabolism. Dilute phosphoric acid is  
used as a gastric stimulant.

Bronze manufacturers have long been  
aware that their product is greatly  
improved in quality and strength when  
fluxed with phosphorus. The alloys  
prepared in this way, known as phos-  
phor bronze, may contain only about  
1 per cent of phosphorus in the ingot,  
constantly employed to conceal  
after castings, but the phosphorus  
nevertheless enhances their value for  
use in making implements which re-  
quire a hard, strong metal, such as  
pump plungers, valves and the bushes  
of bearings.

One of the most important constitu-  
ents of the material used in distress  
signals at sea is phosphorus in the  
form of calcium phosphide. As various  
phosphorus compounds have a very  
dense smoke, this fact was utilized in  
a most curious way during the war,  
when clouds of phosphorus smoke were  
constantly employed to conceal vessels  
in danger of submarine attack, and  
many valuable cargoes and crafts were  
saved in this manner.  
Acid phosphate, for years one of our  
most popular soft drinks, could not be  
manufactured or served at the soda  
counter if it were not for the output of  
the Florida mines.

Methods of Mining Varied.  
The methods of phosphate mining in  
Florida are entirely different from all  
other mining operations and are var-  
ied and interesting. There are several  
varieties of phosphates, known prin-  
cipally as hard rock, soft and pebble,  
and they are all frequently found in  
close conjunction, but they require  
different mining and handling.

Literally speaking, the phosphate  
mines are, more properly, open pits dug  
down from the surface of the earth.  
Almost all the work in the  
mines is done by negro labor. In  
some cases phosphate rock as it is  
loosened by the laborer in the pits is  
shoveled into buckets attached to a  
derrick boom, by which means they are  
lifted with their contents to the sur-  
face. As a rule a pick and shovel are  
the tools used by the miners, but in  
other instances the surface is first  
stripped with horse scrapers and then  
the miners dig the phosphate carefully  
out by hand from between limestone  
cones.

What is known as pebble phosphate  
is mined principally by hydraulic pow-  
er. This pebble phosphate is raised  
from the pits by electric pumps and  
the product is conveyed by air through  
pipes and by cars in covered trestles  
to the storage and racking house, after  
which it is ready for shipment.

Hard rock phosphate is dried in  
(Continued on Page 6.)