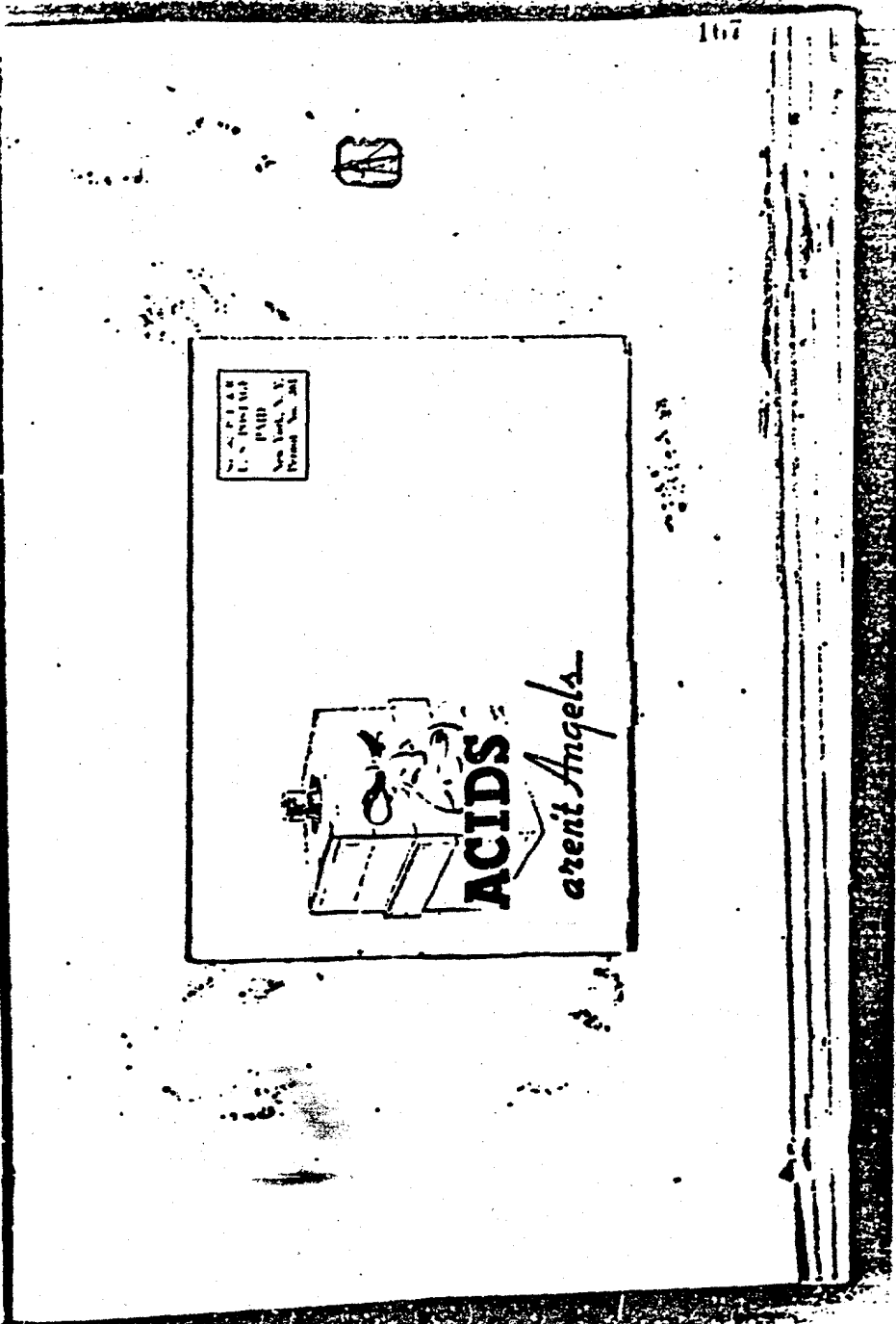


NOTICE: If the film image is less clear than this notice, it is due to the quality of the document being filmed

00057

114116

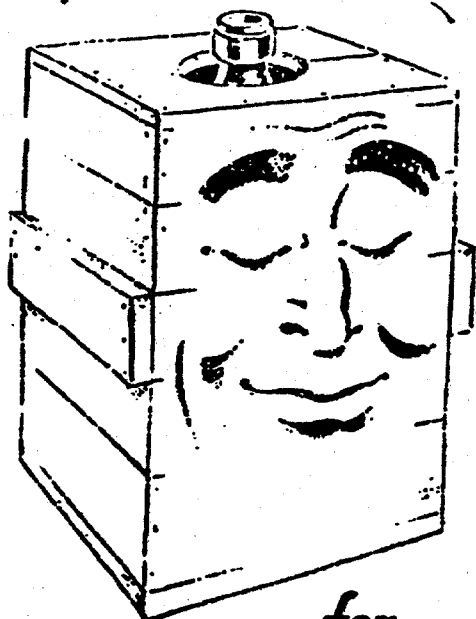
2627



U. S. GOVERNMENT
PRINTING OFFICE
WASHINGTON, D. C.
1950

NOTICE: If the film image
is less clear than this
notice, it is due to the
quality of the document
being filmed

but even
TOUGH *ones behave better*



for
TELLURIUM LEAD

00057

NLI 114117

NOTICE: If the film image
is less clear than this
notice, it is due to the
quality of the document
being filmed

but even
TOUGH *ones behave better*



for
TELLURIUM LEAD

00057

NLI 114118

8637

NOTICE: If the film image is less clear than this notice, it is due to the quality of the document being filmed

00057

NLI 114119

TELLURIUM LEAD IS AN "Acid-Tamer"

UNDER MECHANICAL STRESS

Lead attack, accompanied by mechanical stress, is another trouble making combination for those of equipment. Stress usually accelerates corrosion action. It takes a variety of stress conditions, and only under vibration, Tellurium Lead equipment has shown a marked resistance to failure even in the so-called "wet" service.

Indubitably, our explanation may be found in the smooth surface of Tellurium Lead - a direct result of its fine, uniform grain structure. Surface smoothness tends to inhibit pitting and local corrosion.

Probably another contributing factor is Tellurium Lead's ability to resist the surface cracking which occurs, by corrosion. Tellurium Lead prevents a weak link because it is strengthened by stress.

a Lead that WORK-HARDENS

Heat treated, homogenized, stretched, drawn, Tellurium Lead has more tensile strength than ordinary lead.

The reason is - Tellurium Lead work hardens. It increases its tensile strength when stressed. In short, it actually gets tougher as it takes.

Here are a few of the ways this unique property may add to the life of your handling equipment:

A Tellurium Lead bearing will also withstand wear and tear, under pressure, in strengthened by working. A Tellurium Lead tank lining, when under vibration, is hardened and toughened in the top and bottom. A Tellurium Lead pipe line, subject to hammer, tends to become more fracture resistant than before.

TRY IT IN YOUR PLANT

See a sample of Tellurium Lead and see how it works. It's a real "Acid-Tamer" and it's the only lead that's been tested in the laboratory and found to be more resistant than before.

Tellurium Lead is proving itself a superb "acid tamer" as well for metal from the most aggressive acid to the most inert. In short, it's a real "Acid-Tamer" and it's the only lead that's been tested in the laboratory and found to be more resistant than before.

AT HIGH TEMPERATURES

The remarkable stress at high temperatures is one of the reasons why Tellurium Lead has an unusual ability to withstand acid attack. In corrosion, the most common and particularly in acid attack, stress is a factor.

Heat and stress, Tellurium Lead pipe, tank, and tank linings have shown improved resistance to the acid and heat.

The photographic below, incidentally, provides a partial explanation for the high resistance of Tellurium Lead to acid attack. It shows the grain growth of the metal after exposure to high temperatures.



It's a fact that Tellurium Lead is a real "Acid-Tamer" and it's the only lead that's been tested in the laboratory and found to be more resistant than before.

It's a fact that Tellurium Lead is a real "Acid-Tamer" and it's the only lead that's been tested in the laboratory and found to be more resistant than before.

It's a fact that Tellurium Lead is a real "Acid-Tamer" and it's the only lead that's been tested in the laboratory and found to be more resistant than before.

It's a fact that Tellurium Lead is a real "Acid-Tamer" and it's the only lead that's been tested in the laboratory and found to be more resistant than before.

NOTICE: If the film image
is less clear than this
notice, it is due to the
quality of the document
being filmed

168

Blank
Pages

168-170

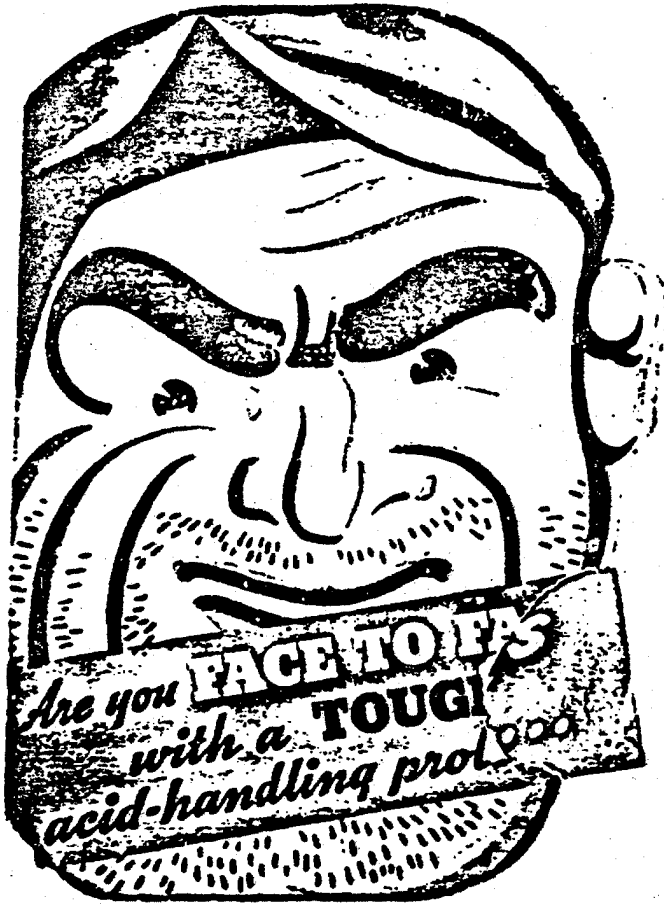
00057

2633

NLI 114120

NOTICE: If the film image
is less clear than this
notice, it is due to the
quality of the document
being filmed

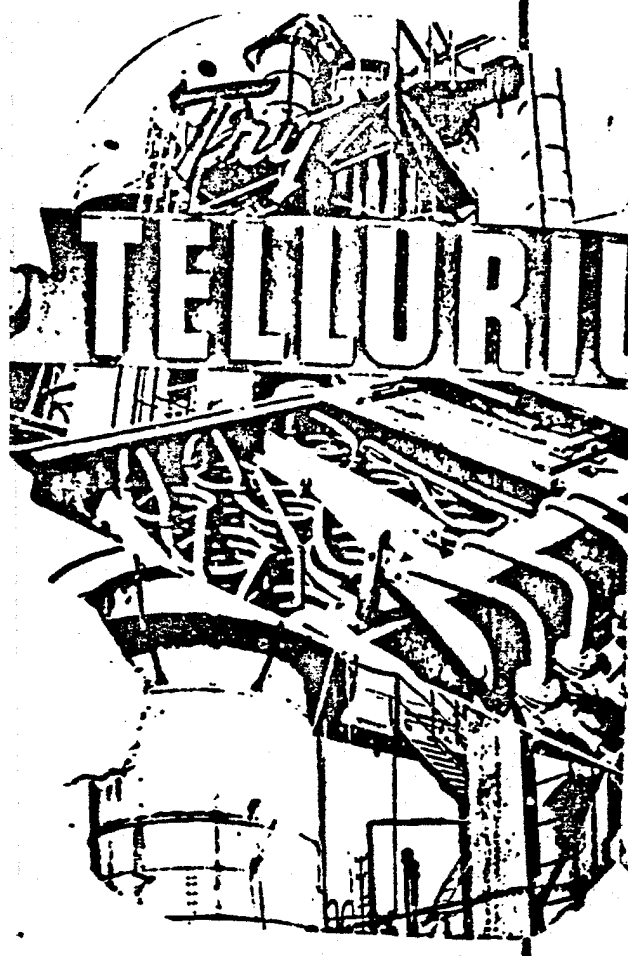
171



00057

NLI 114121

NOTICE: If the film image
is less clear than this
notice, it is due to the
quality of the document
being filmed



TELLURIUM LEAD

the lead that
can "take it"
*in more ways
than one...*

00057

NLI 114122

an

1273 F

166 170
Cost Cured

first...



TELLURIUM
LEAD...

... increased resistance to MECHANICAL FAILURE

FIGHTS

Mechanical Failure...

Tellurium Lead behaves differently than other types of lead under physical strain. With lead work-hardening, however, its tensile strength actually falls as mechanical failure.

You'll find further this ability in "tellurographite" - the lead is installed. Tellurium Lead shows sharpness on the top edge of a lead, becomes softer and stronger at the same point. Tellurium Lead gives lead to form an extremely strong sphere at the head.

You'll notice it again with things subject to repeated bending and restoration due to heat changes. When work-hardens, a Tellurium Lead being used to be used by movements resulting from expansion. There's less chance of the development of a line of weakness which lead to failure.

You'll notice it finally in the longer life of our exposed-to-chemicals. Tellurium Lead is impervious to very action, too, double the transmission of heat and tellurium under such conditions.

first...



**TELLURIUM
LEAD...**

...increased resistance to MECHANICAL FAILURE

FIGHTS

Mechanical Failure...

Tellurium Lead behaves differently than other types of lead under physical stress. This lead toughens when subjected to tensile stresses, actually fights mechanical failure.

You'll find under this ability to "self-toughen" when the lead is installed. Tellurium Lead, being fused over the top edge of a tank, becomes softer and stronger at the same time. Tellurium Lead gives lead its extra strength, usually throughout the tank.

You'll notice it again with tanks subject to repeated use and vibration due to heat changes. Because it toughens a Tellurium Lead tank tends to be completely unaffected by movements resulting from expansion. These tanks have shown all the development of a line of engines which might lead to failure.

You'll notice it finally in the longer life of equipment subjected to vibration. Tellurium Lead is composed of other very common, but double the improvement of lead with tellurium under conditions.

and...

00147

NLI 114123A

12741

NOTICE: If the film image is less clear than this notice, it is due to the quality of the document being filmed

NLI 114124

00147

12751

166 170 (not copied)

second...

but even **TOUGH** ones behave better

...increased resistance to

CORROSION



Due to its use with a "wet" acid solution, the number of processing plants are turning to Tellurium Lead. And that's why, in your area, you may find this type of lead sheet is available, oxidation, better and longer. The material has been available especially under conditions.

For example, in many plants, Tellurium Lead is commonly used in the handling of the chemical process.

The reason why Tellurium Lead is used for process and other at 250° F. found in many other conditions after four years' service. The special properties are to these years.

Under normal conditions with other alloys, Tellurium Lead, under "the Tellurium Lead" has been leading up the other two years in the area.

In many plants, the Tellurium Lead has also shown of resistance where oxidation, stress, or chemical conditions are under attack.

A bookkeeping company reports the largest number of Tellurium Lead sheets in stock, other and oxidation has produced special "Teller" sheets. The Tellurium Lead sheets are the best.

Copied
0

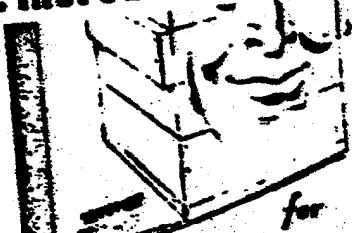
171

second...

but even
TOUGH ones behave better



...increased resistance to



for
TELLURIUM LEAD

CORROSION

First to show with a "test" and solution, an increasing number of protection plants are turning to Tellurium Lead. And there's why. In one after another this type of lead has shown its resistance to acid, alkali, heat and moisture. Its proven resistance has been particularly superior under difficult conditions.

For example, in many plants, Tellurium Lead has shown extremely good performance in the handling of chemicals at elevated temperatures.

One company using Tellurium Lead to handle the oxidizing agents and acids at 250° F. found its losses will be paid within three years' service. The general Electric Corporation reported in three years.

Another company, producing with other sulphate acid at 250-300° F., states "This Tellurium Lead keeps me with better top day after two years in this severe service."

In many plants, too, Tellurium Lead has shown a high degree of resistance where mechanical stress, particularly abrasion, increases deterioration.

A leading company reports the installation of a number of Tellurium Lead tanks in such severe hot liquid and vapors, but previously produced rapid corrosion. Now, the Tellurium Lead keeps them off.

but

NLI 114124A

00147

15761

172

Blank
Pages
172-174

NOTICE: If the film image
is less clear than this
notice, it is due to the
quality of the document
being filmed

00057

NLI 114125