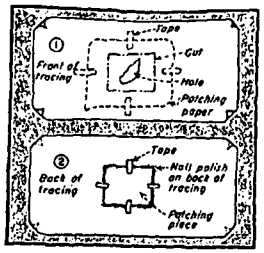
 (Continued from page 106)

HOW TO PATCH TRACING PAPER



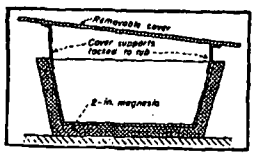
CLEAR NAIL POLISH, the 5 & 10 variety, makes transparent repairs to tracing paper that has been torn or worn through by erasures. The patching edges do not print and the repaired section is stronger than the paper.

Take a new piece of tracing paper, place it over the back of the area to be repaired and tack it in place with pieces of cellulose tape, Fig. 1. With a sharp knife, cut through both patching paper and tracing around the area to be replaced. Carefully peel out the cut from the tracing; tack the patching piece to the tracing paper cellulose tape on the front side. Remove tape and excess patching paper from the back. Then apply nail polish to butt joint of the patching piece and tracing on the back. When the first coat dries within a few minutes, apply a second coat. When polish dries, tear away tape.

WILLIAM KACAN *Brooklyn, N.Y.*

BURN SULPHUR INSTEAD OF USING SULPHURIC ACID

IN TREATING cooling-tower and spray-pond water to reduce calcium and magnesium carbonate, sulphur burning can replace sulphuric acid, which is hard both to handle and to proportion correctly. This practice effects considerable saving in our plant, reducing treatment costs to half. It represents about $200 to $250 monthly reduction.



Sulphur ignites, melts and burns readily making it easy to construct a burner. The burner we started with and used for a number of months was a laundry tub of 30-in. dia. To keep the sulphur molten during cold weather insulate the tub with 2 in. of magnesia as shown in the sketch. An iron cover or hood should be provided to keep out rain and snow.

Burner size can be found by trial and error. Our 30-in. burner consumed 200 lb of sulphur a day. On days of heavy blowdown when this was insufficient we would light off an additional pail or two of sulphur. With the burners set at the cooling tower the latter acted as an absorber for the sulphur fumes. They entered the induced-draft type tower through the air inlet and were completely absorbed before leaving out the top. There was only a slightest "sweetish" smell at the tower air outlet.

The fog issuing from the tower was slightly heavier during the winter. This has not proved objectionable, however, even for an in-town location.

When the tower water must be chlorinated, stop the sulphur burning for a long enough period in advance for the sulphurous acid to be completely oxidized to sulphuric acid, or the chlorine will be used up. We kept ours off for one hour in advance and an additional hour after chlorination was completed.

K M WHITE *Clinton, Iowa*

Sheet-Metal Housing Protects Outdoor Motor

TO PREVENT the accumulation of dust and grease on a motor driving an outdoor pump, a sheet-metal housing was fitted snugly over the motor. The housing has gaps to span the power connection and to leave the bearing ends exposed for inspection. The skirt or housing base aligns with the motor base, but leaves air gaps around ends and across the feet of the main casting.

Air entering the bottom flows up around the motor and out through the slot at the top. A curved cover set about 1½ in. above the slot allows air circulation but excludes rain and wind-blown trash. Welded up from light sheet metal the cover can be placed or removed by one man and needs only an occasional coat of paint.

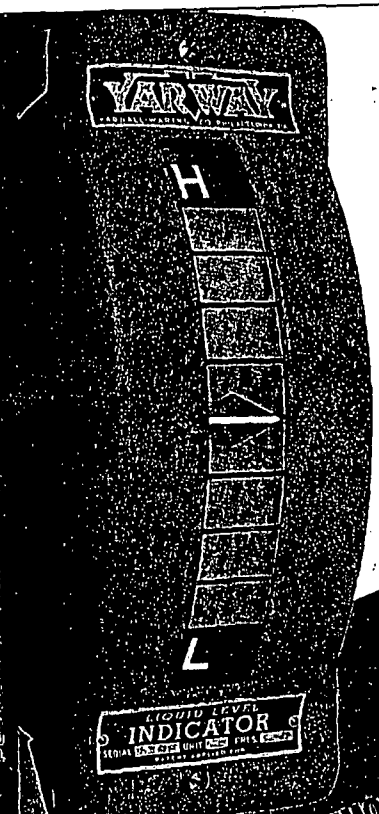
M H PEARCE *Carthage, Texas*

CONTRIBUTIONS INVITED

Do you have ideas and techniques that have been successfully used in practice? Then why not pass them along for everybody's benefit by submitting them for publication in this department? Power pays $20 for each item accepted.

Your manuscript need only be in rough draft form, containing all the facts, and your sketches in pencil. We will take care of dressing them up.

Power Engineers' Notebook will be devoted to power problems, big and little, dealing with design, operation and maintenance. They will range over the entire field—mechanical, electrical, hydraulic, structural, operating procedures, maintenance reduction, testing, etc.



The popularity of the Yarway Liquid Level Indicator as a dependable boiler room instrument for instant, accurate, eye-level readings of overhead water levels, has led to a demand for supplementary *remote* signal devices *operated from the indicator.*

The new Yarway Control Unit with its remote light or horn Hi-Lo Alarm Signals, now answers that demand.

These signals installed at one or more remote points where a check in water level is desirable, provide both high level and low level alarms, within the full operating range of the Yarway indicator.

Light alarms show red for high or low levels—green for normal level. Horn signal has two vibrating horns of different tones, or a single horn for both high and low levels.

For complete details on this latest addition to the Yarway line of dependable steam plant equipment, *write for* Bulletin WG-1822.

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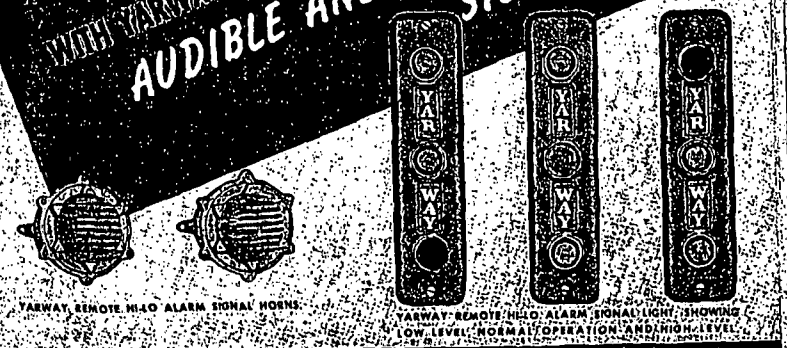

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