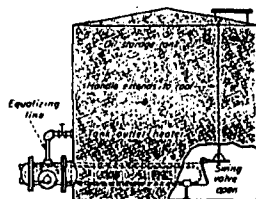


ARGUMENTS

Here's the place to unload your gripes to editors, manufacturers and fellow engineers



Removing Tube Bundles

WHILE E H ROSEN's article, "Removing Coils from Full Oil Tank" (p 125, Nov Power), explains a practical way of shutting off oil supply to a tank-outlet heater, the method is very expensive. Large-diameter gate valves are costly. In some cases cost of valve may exceed that of heater.

Simple-operating swing valve shuts off oil flow if tube bundle has to be removed. A machined surface on the heater shell and a flapper valve hinged at top-back end of shell do the work. Flapper has neoprene insert gasket that acts on the machined surface, oil pressure inside tank causes positive sealing. Handle extends to roof. Oil-equalizing line between storage tank and heater shell allows easy reopening of swing valve by equalizing pressures. Valves can be furnished as standard equipment.

H S LEWIS Newark, N.J.
Manning & Lewis Engineering Co

Is Dead Stop Possible?

MARMADUKE's story about a Liberty ship's engine stopping dead (p 142, Nov Power) is just a sea story. With his safety valves blowing to atmosphere, he must have had about 235 psi both in his drums and at his throttle. The wheel, having just left the water, must have been turning at 72 rpm or more. Momentum of wheel, bull gear, crank webs and all the other heavy parts, plus about 25 in. Hg in the condenser and 235 psi at the throttle, would certainly have kept the engine running.

If some tremendous force had brought it to a sudden dead stop, Marmaduke would have had to break out the oars and row to port, because he would not have had a propulsion plant left.

J J CRIST Sheephead Bay, N.Y.

EDITOR'S NOTE: But engine did stop, regardless—just as Marmy said.

About 'Namby-Pamby Education'

I CAN EXPRESS an opinion on your editorial, "Namby-Pamby Education" (p 67, Nov Power), for these reasons: (1) I came up both ways. In 1906, at 16, I was taken out of high school and put to work. Four years later I went back, finished both high school and college. (2) For a year I taught vocational classes in high school, and observed the attitude of one type of student.

I started working in the days of catch-em-young, treat-em-rough, tell-em-nothing. The old practical-experience men looked on college graduates as suspicious characters. Anything learned out of a book was no learning at all.

These men said: "Authorities require four years of high-school subjects to enter college. None of the subjects has any practical value, but they are required. So unless you are going to college, high school is wasted. It is better to go to work as soon as you finish grammar school."

But I know from experience that this reasoning is wrong. In any branch of engineering or science, high-school subjects are absolutely essential. Even if I had known I had to work for several years between high school and college I would have taken a college-preparatory course.

This is my idea of a good course: (1) Mathematics: algebra, plane, solid and spherical geometry, and plane and spherical trigonometry. If possible, also coordinate geometry, elementary calculus or descriptive geometry.

(2) English: Four years, with as much oral and written composition, public speaking, and debating as possible.

(3) History: Four years, including ancient, medieval, modern, English, and U.S.; also U.S. and your own state constitutions, and your city charter.

(4) Science: physics, chemistry and

physical geography, possibly biology. (5) Latin: two years or more to give you a better understanding of English and of scientific terms.

(6) Mechanical drawing: one year with particular attention to care of instruments, lettering and ability to use neat pencil and ink work.

(7) Freehand drawing: one year to develop a sense of proportion.

I was taught that a boy's parents to considerable effort to send him to school. So it is his duty to make the most of his opportunities. If he fails, this he should be taken out of school and put on his own.

Since adoption of compulsory education until 18, or work permits at 16, type of student is kept in school whom education beyond mere reading and writing has doubtful value. Numerous boys in high school say, "Just wait up time until I am 16 and can get a work permit. What's the use of school anyway? I can make as much money heating rivets in a shipyard as a school teacher earns after five years of study in college."

Another type believes he can take it easy, have a good time, then make last-semester spurt to finish at the top. Other students apparently do poorly at the beginning, but hard work and concentration finally show results.

Education should emphasize fundamentals. Teach a student what he is studying and why, show him it is his interest to make the most of his opportunities. I have known men studying elementary arithmetic in night school say, "How foolish I was not to learn this earlier. Why didn't my parents and teachers make it clear, instead of letting me grow up with wrong attitude on education?"

H T LIVINGSTON Los Angeles, Calif.

Likes Proverbs

MAY I COMPLIMENT you on the leaflet entitled, "New Proverbs for Young Engineers"? These proverbs constitute information that all men wish to have, but they don't know where to find it. Let me commend you on the foresight and ingenuity you have shown in com-

pling this most interesting leaflet. W C HARGRAVES St Louis, Mo.

EDITOR'S NOTE: Proverbs referred to were written by Phil Swain and published in POWER some years ago. Many thousands have been distributed. If you would like a copy let us know. Leaflet is free while supply lasts.

User Reports

ARMSTRONG UNIT TRAPPING

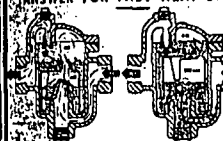
cut his fuel bill

20%

and speeded heat-up

15%

"BLAST" TRAPS PROVE TO BE ANSWER FOR FAST HEAT-UP



Where steam is turned on and off periodically, blast traps give really fast heat-up, provided accumulated air and condensate is pocketed and will be pushed out ahead of incoming steam. A high auxiliary thermic vent in the heater opens when the trap is cold, letting air whistle right through trap. When trap reaches 310°F the thermic vent closes and trap operates as a standard trap (see drawings above). Blast traps are ideal for single pipe coils, small on-and-off unit heaters, and all multiple coils, drip points, etc. See page 39 of The Steam Trap Book.



Experience of Greenhouse Owner Points Way to Greater Efficiency in Any Plant . . .

THE problem of operating steam heated equipment efficiently is basically the same whether you operate a greenhouse, a refinery or a food processing plant. That is why the experience of Reiss' Greenhouses, Minneapolis, should prove of interest and value to you.

By replacing old, inefficient steam traps on heating piping with an individual Armstrong "blast" trap on each coil, Reiss' cut its fuel bill exactly 20% and speeded-up heating of cold coils by 15%.

This benefit was gained solely because Armstrong traps drain condensate and air from steam heated units as fast as it accumulates and without leaking steam. In Reiss' case the "blast" traps described at the left were particularly beneficial, and may be in your case. For complete information call your local Armstrong Representative, or write:

ARMSTRONG MACHINE WORKS
812 Maple Street, Three Rivers, Michigan



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Complete data on selection of traps for all types of equipment plus installation and maintenance recommendations, trap list and physical data.



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Please send me The Steam Trap Book.

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