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# Engineering

## ▼ Review



### Actually Platinum Blonde

**J**EAN HARLOW's natural platinum blonde hair matches exactly with the piece of platinum she is holding. Engineers took this color matcher to her suite to settle once and for all whether she's a platinum blonde or not. The match was perfect, so there's no argument.

More sensitive than human eyes, the color matcher with its never-erring "electric eye" was developed in the Westinghouse laboratories to assist industry to duplicate colors in manufacturing processes.

Reflected light is put to work in this new color matcher. The quantities of light reflected respectively by two samples of color are measured by two "light-sensitive" photo electric cells with a meter to indicate the degree of match.

Samples are tested under red, green, and blue light in succession. If they match under these three colors, they will match under any lighting conditions, say the engineers.

The greatest use of the color matcher will be made in the textile and paper industries and in those industries which manufacture molded materials, pressed materials, micarta, tile, floor materials, enameled metals, and steel tiles used in interior decorating.

### The Transportation Dilemma

**T**ODAY, there are two great classes of transportation waging a bitter fight for supremacy in that field. They are the railroads, and the motor trucks and busses. The two classes of motor traffic, aided by the fact that they have no right-of-way to maintain and can reach far more places than the railroads possibly can, are fast making the railroads a losing proposition for hauling passengers or commodities other than very heavy or bulky freight.

The author, a consulting engineer, feels that much of this competition is needless and that a combination of the two into one organization so that each would perform the functions for which it was best fitted, would benefit the operators as well as the general public.

As a step in the direction of better organized trans-

portation, the author suggests the erection of an elevated super highway over all the trunk lines of the railroads permitting speeds of from forty-five to seventy-five miles per hour in the fast lanes and slower traffic to be kept in separate lanes for safety. Underneath the elevated highway, the plan calls for an elevated railroad suspended on rails from the roadway similar to the elevated suspended railroads now in use in Germany and Scotland. It is now practical to maintain a schedule of from 125 to 150 miles per hour on such a road and would provide a speedy and safe land transportation undreamed of heretofore.

If the present railroad lines underneath the elevated highway and railroad to be used for freight hauling and local traffic only, all forms of land transportation would be combined into one unit and thus offer a solution to present muddle in which the industry is now involved.

—Mechanical Engineering.

### Engineering and Administration

**E**NGINEERS, Managers, and Engineering Education. An engineering education, according to the authors, is an important stepping stone to executive positions. From surveys made by the A.S.M.E. and the S.P.E.E. it was learned that about three-fifths of all engineers spend over half their lives in technical or general executive work. The young technical graduate, of course does not immediately step into an administrative position but because of superior training soon becomes in charge of the work of others as well as his own. After an engineer has advanced into technical executive work, he often takes over general management which involves a knowledge of many things other than pure technical work. Personal qualities demanded of men in such positions are good character, leadership, and the ability to see a problem or situation from all angles and not work from a specialized point of view.

This produces two distinct types of engineers; first those who desire to engage only in research and specialize in a particular field of engineering, and second, those who are

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interested only in knowing enough about engineering to be able to manage and direct its work. The authors feel that an engineering course should be arranged to fit the needs of the latter group. That is, an engineering course combining engineering and business administration so that the graduate of such a course would have a working knowledge of the fundamentals of engineering, and also have the necessary business training as a foundation for general executive work.

*—Mechanical Engineering.*

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