

DROOF that art and the machine have formed a partnership was disclosed recently by an exhibition at the Art Center in New York. It was not the usual show of sculpture and paintings.

In one exhibition chamber there was a kitchen sink of chrome-nickel steel with a stainless luster like that of silver. Arranged beside it were handsome stoves, scales, clocks, coffeepots, other kitchen utensils and a wide variety of utilitarian objects. All had the singular beauty of shape that marked them as the products of factory machines guided not alone by engineers, but artists as well.

One object which was not machinemade was a scale model of one of the season's smart automobiles, a luxury-class, sixteen-cylinder car. It was an expression in steel, rubber and paint of an intangible something calculated to win the fancy of people able to write checks big enough to buy its magnified likenesses when factory magic should cause them to be delivered into dealers' show rooms.

Walter D. Teague, an artist, was the

man responsible for that microcosm of the product. Teague is not an engineer but he knows how to collaborate with engineers. He is not a salesman but he knows how to collaborate with salesmen. Without their aid his design would have been valueless: without his or a similar intelligence their product would have been less valuable than it is. They made the mechanism; he gave it beauty. The quest for beauty is universal.

This fact is impelling the biggest and best managed manufacturing enterprises to seek counsel among the small group of men who are equipped to design beauty into the products of factory machines. There are not many of them. One of the pioneers is Joseph Sinel and he has been engaged in this work only about nine years.

You may judge Sinel's ability as a designer the next time you find yourself standing on the platform of a pennyweighing machine in the five and ten-cent store. If it is one of the machines that prints on a card your weight and the date of the transaction, its design is Sinel's work. But this scale did not go into production merely because Sinel had designed a handsome device. First, one was placed ENGINEERS

among a row of the older mechanisms.
Then the entemper were waterbed. Nine

Then the customers were watched. Nine out of ten of them, after a glance, stepped on the scale the artist had designed. Its beauty inspired confidence. Beauty pays.

Artists do not create beauty so much as they recognize it. The ability to recognize beauty is not comfined to artists. A mechanic recognizes it when he selects a hammer from the hardware store. A farmer recognizes it when he selects by its action a horse.

How does the designer work? I sought the answer to this from Henry Dreyinss. He is only twenty-eight years of age, yet he has reached a place among the leading designers of the country. He promoted himself into the field of industrial designing after creating each week a fresh stage



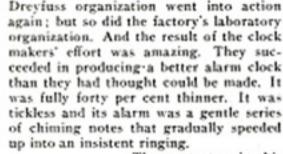
Top. Henry Dreyfuss, Young Designer, Planning a New Cabinet; Below, Preparing to Redesign a Washing Machine

and dance numbers that supplemented the motion pictures in one of the big Broadway theaters. Here he was dealing with illusions and could contrive Aladdin-like palaces cheaply out of paint and canvas. But in his more important work today Mr. Dreyfuss has to fetter his imagination with the "no can do" of factory executives. In explaining this, he picked up an obsolete alarm clock, a tin can supported on brass legs screwed into the bottom of the cylinder, a harsh bell with a ring handle in the top.

Beside this antique, he placed a modern alarm clock. A comparison of the two instruments was dramatic. Dreyfuss did not suggest that he was responsible for the revolution in shape and performance of this instrument. He was simply trying to make vivid the importance of design in machine-made articles. It was this

modern clock he was asked to improve.

The first thing he did was to explore the factory where these clocks are made. The next step was to study the competition of the clocks produced in that factory. This



The next step in this collaboration was the production of some three-dimensional models in clay and wood and the delivery of these with a final half dozen sketches

was done by buying all the alarm clocks on the market. Thereafter for days Mr. Dreyfuss, Mrs. Dreyfuss and his assistants devoted themselves to alarm clocks. A row of them awakened him with their clamor in the morning. A few experiments convinced him which one had the dial he could see best with sleepy eyes.

Then he tried the effect of the various alarms. Eventually the Dreyfuss organization produced a series of idea sketches. Sometimes as many as 100 of these are carried into the first design conference.

In this case, as usual, the manufacturer attended the conference. So did his production manager, his sales manager and a representative of his advertising agency. To this group Dreyfuss announced his con-

viction that the firm ought to make an alarm clock of slimmer proportions.

Then, supposing it was a typical conference, the men began to run through the idea sketches. Presently the sales manager's eyes began to gleam.

"Here's one I could sell," he proclaimed.
"But I can't make it." said the production manager, dogmatically.

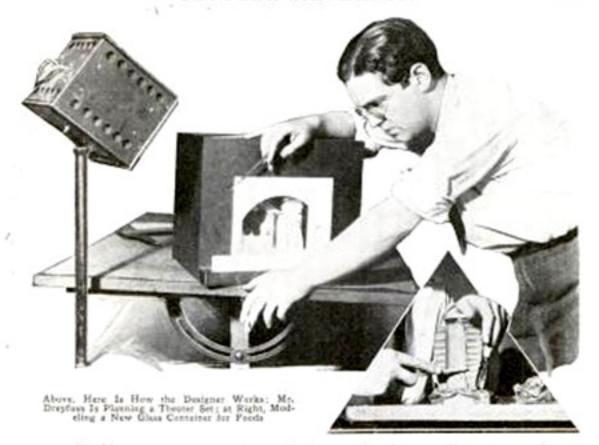
Thereafter the qualities that appealed to the sales manager were discussed along with the obstacles of manufacture foreseen by the production manager. When all hands had made themselves clear, the



Top, Lurelle V. A. Guild, an Artist Who Turned Designer; Below, Joseph Schol, Who Designed Penny Weighing Machine

to the factory. The working drawings were made at the factory. Thereafter the production manager had to translate those drawings and models into machines to make the separate parts. This process is called retooling and the world became aware of the seriousness of such a step to a factory when Henry Ford decided to supplant the planetary-shift model-T with a gear-shift car with smart artistic lines. Retooling in that case is said to have cost \$43,000,000.

That huge sum ought to convince anyone that industrial designing is not just a



matter of making pretty pictures. Sums of proportional size must be spent by any manufacturing enterprise that abandons an old-style product in order to feed beauty into its machines. In consequence a designer has to be more than an artist. He must be a salesman as well.

Here you have the principal motive that impels manufacturers to seek the counsel of artists to improve their products. Average men and women, they have discovered, have much better taste than is commonly credited to them. In consequence the handsome article of factory make finds a wider market than ugly rivals. But there is another benefit in sound designing. Clumsiness of design invariably represents waste of labor and materials. So sound design commonly results in lower manufacturing costs. These two economic factors are swiftly creating a rich field for young men and women of artistic feeling and training. Art is no longer limited to the making of pictures and sculpture. The field is as wide as industry. The rewards are great. Some of the best have incomes of \$50,000 and more a year.

Most designers feel they can function

best as free lances rather than to devote all their time to one factory. So it happens that a man who has designed a splendid coffeepot is sometimes asked to redesign a locomotive, a street car, or the interior of a theater. The designer's freedom from traditions, from the fetters of habit, is what makes his knowledge helpful to the automotive engineer and the architect.

Where do they get their ideas? The answer of all of them to this is the same—anywhere, everywhere. The flat designers, those who create patterns for textiles, wall papers and other surfaces have always found their inspiration in nature. The explanation of this is that nature is the best designer.

Two factors are creating an increased demand for industrial designers. Sharper competition is one; the other is a supply of new materials. The stainless steels are being applied to the making of all manner of utensils. The synthetic resins, of which bakelite is one, have also created opportunities for manufacturers. Guided by the intelligence of artists, these substances are being wrought into beautiful factory-made—and therefore cheaper—objects.