

COMMENTS ON ARTICLE WRITTEN BY IDA M. TARBELL.

On page 4, it is suggested that the 3rd paragraph read as follows:

I once had the good fortune to talk with a man who went as a boy with George Westinghouse over fifty years ago, a stenographer determined to make an engineer of himself. It took eleven years, but he did it, and, in the meantime he had the close contact with Westinghouse himself which a small plant and the informal ways of the day permitted. This man, Edward S. McClelland, Sr., still active in the plant, believes that the way Westinghouse worked in those days is the way men must work now if they are to do big things in industry. He recalls the day in 1892 when Westinghouse came home with the contract for lighting the Chicago Fair of 1893 in his pocket- using the alternating current. This contract meant designing and building engines and electrical apparatus in sizes and speeds beyond anything yet attempted by his companies. Greater horsepower and higher speed with limitations as to space that looked prohibitive at the time to the engineers, and he wanted them the next day.

"Westinghouse is a fool, it can't be done," the engineer said. "But he had his pencil out as he said it," McClelland tells you.

"That was Westinghouse. He put us on our metal, asked the seemingly impossible. Remember back in '95 there were limitations on materials we don't know today. The art of casting parts of steel was in the process of development and the present alloyed steels were in an experimental stage.

"Compared with today, work had to be done with very crude devices, and, in many instances, with inadequate equipment. There was no crane equipment of any kind in any departments of the shop. Material was moved by means of lifting jacks and rollers on the shop floors, with, here and there, a differential hand operated chain hoist over the larger machine tools. Because of the inadequacy of the machine tools and the head room in the shops these engines could not be wholly assembled before shipment. Their complete assembly was accomplished for the first time on the foundations in the buildings of the Chicago Fair. For

boldness of design, speed in building, and spectacular performance, these power units brought great credit, publicity and profitable business to Westinghouse. Engineers said they wouldn't work, but they did and ran through the whole fair without an accident."

"That was the Old Man- always put it up to young men. The result was that every job was a challenge and, as the staff was small, everybody was in on it. Nothing like that now."

"Oh, I don't know," broke in one of the group. "What was that order Pop Kennedy put through the other day?"

And they called him in - for many years now Superintendent of the Machine Shops. It was hard to pick the story out of him.

"Just another job," he said.

But it came out that on a Saturday forenoon a few weeks before it was announced that if the shop could lay down in a certain Ohio town in ten days time a sizable order for machines having to do with shovels for the Hoover Dam, why the order was theirs.

"It's a buyer's market these days," broke in one of the company grimly. "You don't bargain, you accept the impossible."

It was, as I have said, a Saturday morning. The pattern makers were on a picnic. ~~They were enjoying their picnic lunch and participating in athletic games and other festivities~~ ^{but} when the news came of the order, they left the picnic and hustled to the plant. Before Sunday morning the patterns were ready. That day the casting began and by ~~Wednesday~~ ^{THURSDAY} night the machines were ready to be packed into the waiting trucks. Arrangements were made for an open road and at eight o'clock on the next ~~Thursday~~ ^{FRIDAY} morning they knocked at the gates of the Ohio plant.

"Here are your machines," the driver said. And the answer is said to have been, "You lie. It couldn't be done."

But it had been done.

"Only another job," said Pop Kennedy.

"That's the way we always worked under the Old Man," said Edward McClelland. "That's the way the average man likes to work and will work if you let him in. All that is needed is leadership. Men will follow anywhere if you show them a well defined aim. They understand, too, how each depends on the other, how if the pattern is a "flop" the casting will be a "flop". Give them a look in - a share in the undertaking and nothing can stop them."

Note- Everywhere where electric current is referred to, it should be written alternating instead of alternate.

12-16-32.

E.S. McClelland, Sr.