2. The Birth of an Idea
A Radio Talk by Charles F. Kettering

This Sunday afternoon, in every part of the country, people are listening to this great orchestra. Radio can carry this music to any place in the world.

How long has it taken man to do this? The records show we have been developing the elements of radio for about a hundred years. But, if we made a more careful study, we would find the thing really started in the year 600 B.C. - more than 2,500 years ago. It really started as a thought - a very weak, vague idea. In the year 600 B.C., a Greek philosopher, Thales of Miletus, found that by rubbing amber he produced a force that would pick up straws.

Two thousand two hundred years later, Sir William Gilbert, Queen Elizabeth's physician, did a little more thinking and experimenting with the idea and called the phenomenon electricity. Sixty years later, Otto von Guericke, a German, built a machine to generate static electricity.

One hundred years later, Benjamin Franklin identified positive and negative electricity and proved lightning and electricity were the same thing. In 1820, Oersted, a Dane, proved that electricity would produce magnetism. And about the same time, Faraday did some experimenting and discovered the principles of the electric motor.

Now, here is what happened. After Faraday, came Morse and Bell, who used the idea as a means of communication - and the telephone. Edison made the idea glow and lit up Marconi and deForest went Morse and Bell one better foundation for radio.

But here is the point - for over 2,500 years, that electrical thought had been growing. It had been carefully cultivated and expanded by a few straight-thinking men - a Greek, an Englishman, a German, a Dane, an American and an Italian. Often these men were working at the same time, unknown to each other. And this small, apparently unimportant idea in the year 600 B.C. has grown until it has literally changed the face of the earth and the habits of its people.

Here is an interesting thing about intangible ideas like this one. Once they occur, they are indestructible. Wars, plagues and persecutions may drive them out of sight for a while but they always spring back again perhaps in another man's brain, perhaps in some other part of the world, to be cultivated and enlarged. And I cannot feel but sometime there will
be another mentality similar to Schubert's that will catch the same theme that he had, and write the finishing part of that great symphony.

There have been only a few thousand of these thought cultivators in the history of the world. It has been said that except for about 1,500 of these thinkers living in the last 3,000 years, we might still be living in caves.

Now, somebody might say that if these people are as rare as all that there isn't much that can be done about it. We'll just have to wait until one happens to come along. But that isn't true. We can develop thinkers just as we can educate people in other lines. If no one practiced playing the violin, there wouldn't be any great violinists. Through practice, we can develop this ability to think.

Along with these original thinkers, we have millions who are afflicted with mental laziness - those who are satisfied. They are the easy thinkers. When a new thought is given them, they find it much easier to agree than to question it. And that is dangerous, especially if the idea is a bad one.

We are fighting the world's greatest war because millions of people were sold one of these bad ideas. But I am still in hope that we can some day put as much energy into the development of good, constructive ideas as we are now putting into the fighting of a bad one.

And speaking of good, constructive ideas, we might still go back to 600 B.C. and find out why the amber picked up the straws. We don't know that yet. If we did, I believe we could open up new fields that might be quite as important as the electric light, the telephone or the radio.