## Landau James E.F, The Elements

Now, if I may digress momentarily from the mainstream of this evening's symposium, I'd like to sing a song which is completely pointless, but is something which I picked up during my career as a scientist. This may prove useful to some of you some day, perhaps, in a somewhat bizarre set of circumstances. It's simply the names of the chemical elements set to a possibly recognizable tune. The tune is that of The Major-General's Song from Gilbert & Camp; Sullivan's The Pirates Of Penzance. There's antimony, arsenic, aluminum, selenium, And hydrogen and oxygen and nitrogen and rhenium, And nickel, neodymium, neptunium, germanium, And iron, americium, ruthenium, uranium, Europium, zirconium, lutetium, vanadium, And lanthanum and osmium and astatine and radium, And gold, protactinium and indium and gallium, And iodine and thorium and thulium and thallium. There's yttrium, ytterbium, actinium, rubidium, And boron, gadolinium, niobium, iridium, There's strontium and silicon and silver and samarium, And bismuth, bromine, lithium, beryllium, and barium. Isn't that interesting? I knew you would. I hope you're all taking notes, because there's going to be a short quiz next There's holmium and helium and hafnium and erbium,

There's holmium and helium and hafnium and erbium,
And phosphorus and francium and fluorine and terbium,
And manganese and mercury, molybdenum, magnesium,
Dysprosium and scandium and cerium and cesium.
And lead, praseodymium and platinum, plutonium,
Palladium, promethium, potassium, polonium,
And tantalum, technetium, titanium, tellurium,
And cadmium and calcium and chromium and curium.
There's sulfur, californium and fermium, berkelium,
And also mendelevium, einsteinium, nobelium,
And argon, krypton, neon, radon, xenon, zinc and rhodium,
And chlorine, carbon, cobalt, copper, tungsten, tin and sodium.
These are the only ones of which the news has come to Harvard,
And there may be many others but they haven't been discovered.
And now, may I have the next slide please? ...carried away there.