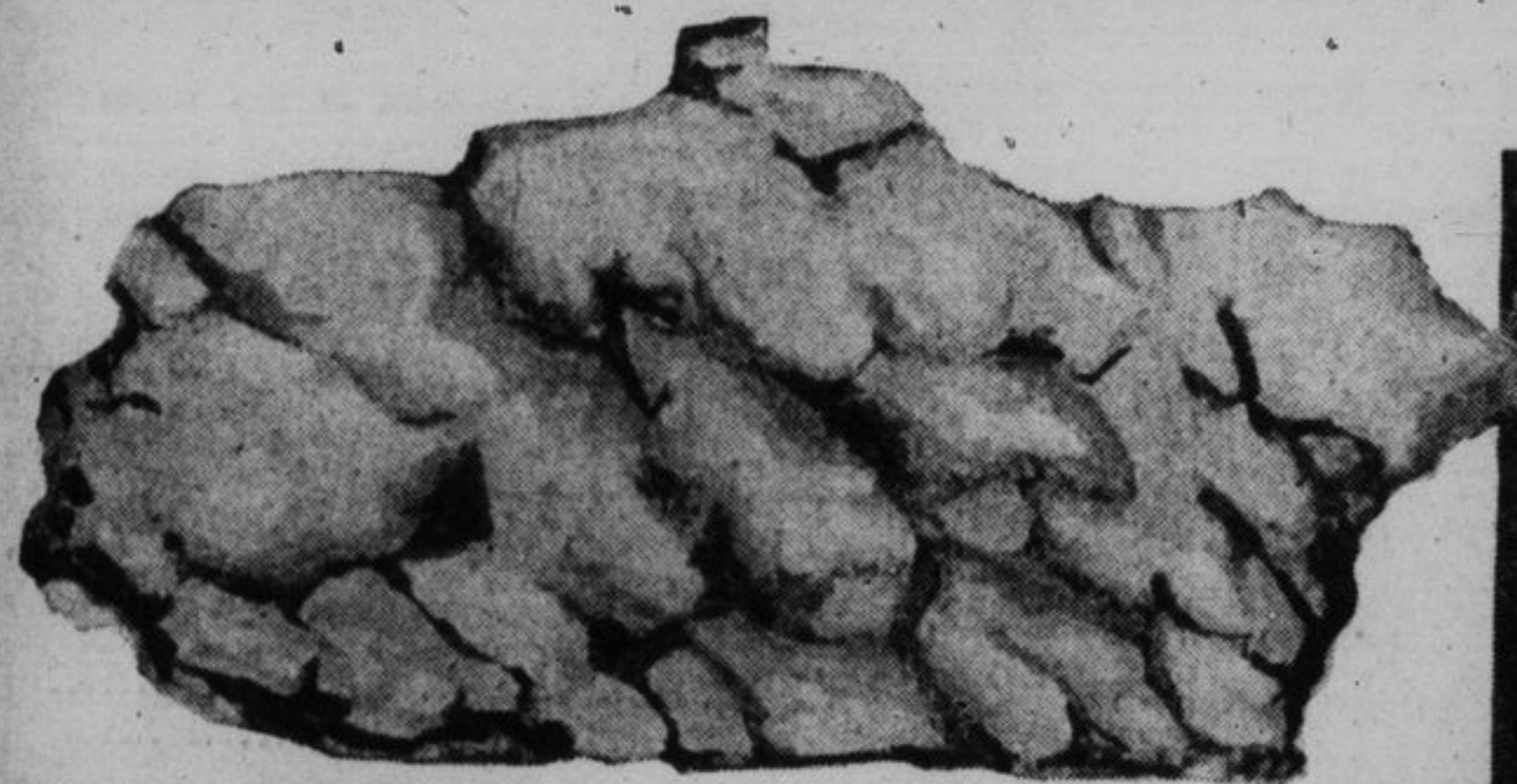


Will Science Upset the World With Artificial Gold?

Under Government Subsidy German Chemists Are Straining to Make the Precious Metal—and If They Do They Will Turn Civilization Topsy-Turvy

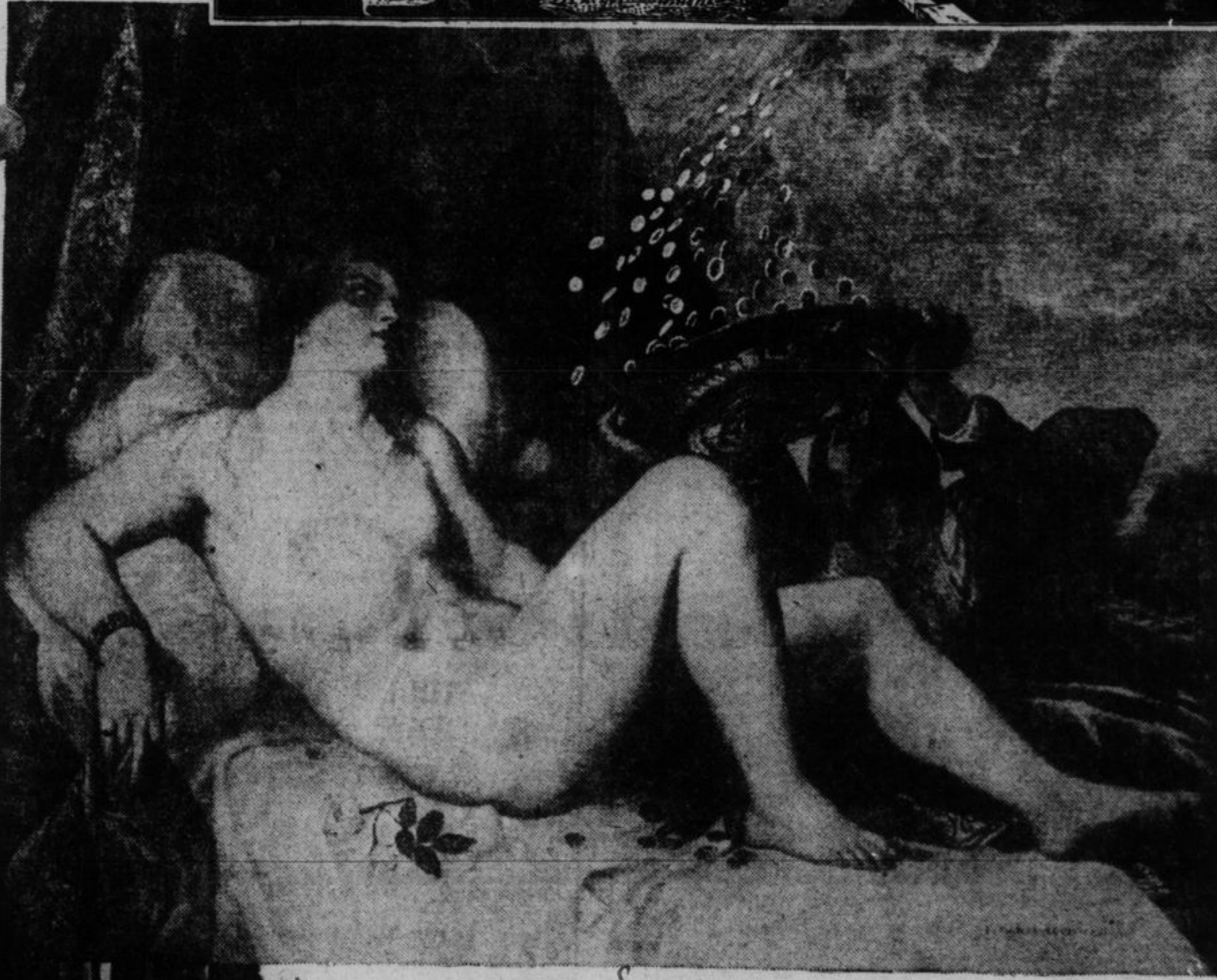
This is How a Famous Cartoonist of the Middle Ages Depicted an Alchemist at Work Trying to Transmute Lead Into Gold, Surrounded by Familiar Spirits, Devils and Witches. From an Old Engraving by Jerome Cock.



One of the Largest Gold Nuggets Ever Found in America. It Weighs Twenty-two Pounds and Was Unearthed at the Reed Mine in North Carolina. Photo Actual Size.

THE cabled announcement that German scientists are at last on the track of a formula to produce synthetic gold, has created a world-wide sensation. One dispatch even goes so far as to say that there is a gram of artificial gold already in existence, and that the secret process is being jealously guarded while further experiments are being prosecuted under the patronage of the German Government itself. "Well, and what of it?" you may say to yourself after reading thus far. "Let the chemists and scientists rave. It doesn't interest me." Such a discovery would be, indeed, revolutionary in purely scientific circles—but it would be even more revolutionary in the world of business and finance—and in the ordinary workaday world in which most of us live. In fact, it would set the whole world topsy-turvy, and probably bring about

ing herself in this age-old problem is not far to seek. Her war and reparation debts have been fixed by the Allies in terms of gold—or its equivalent—and Germany owes three times as much gold as there is in all the mints and treasuries and bank vaults of the entire world today. She is like a poker player whose loss is equal to three times all the chips in the game, and in the normal process she would have to win all the chips three times in succession to "pay out." Her present scheme, to follow out the gambling analogy, is to manufacture the chips which she owes. Now, suppose a man in a poker game actually did this? Suppose he manufactured a lot of chips which were exactly like those in the game, but which had not been paid for at the "bank"; and suppose



Jupiter Transforming Himself into a Shower of Gold to Win the Favor of a Mortal Woman. "The Danae." From Titian's Famous Masterpiece in the Vienna Gallery.



Gold in Bars and Barrels, Ready for Shipment from the Vaults of the United States Treasury in Washington.

he succeeded in introducing them into the game? What would happen when the time came to "settle up"? Not only would his "manufactured" chips be worth only twenty-five cents on the dollar, but all the other chips in the game would be equally reduced in value. And if the other players imitated the trick and dumped a lot of "manufactured" chips into the game—all the chips would, eventually, become absolutely worthless. One British scientist says: "That is exactly what may happen in the greater world-wide 'game' of banking and finance and business if Germany has discovered and can apply a practical and inexpensive method of manufacturing artificial gold. The more gold Germany manufactures, the lower will fall the value of all gold,

until, if the process is carried far enough, gold will become of no more value than iron or lead. "And as the monetary and trading systems of practically all countries are based on the 'gold standard,' the entire financial fabric of the world may be ripped to pieces." Statisticians say that there's only about eight and one-half billions of dollars' worth of gold coin and bullion in the entire world, and on that foundation is pyramided a world-wide currency and credit system of more than 525 billions. If the gold standard were destroyed, not only would the foundation be wrecked, but the whole superstructure would come tumbling down. That is why Professor Irving Fisher, of Yale University, one of America's leading economic and financial experts, has hur-

riedly called for Germany to investigate these remarkable reports at first hand. Have you ever asked yourself why gold—rather than any other metal or substance—is so universally prized—why it has been, in all countries and all ages, the standard of wealth and the synonym for riches? Such things do not occur by accident, and the fact that gold is rare—and consequently valuable—is not alone a sufficient explanation. There are other metals, other elements, just as rare and valuable, many of them even more valuable.

Here are some of the additional reasons why gold is so highly prized by mankind: Gold is a beautiful color, bright yellow—the color of light and the color of the sun, which humanity for thousands of generations worshipped as a god. It has lustre as well as color. It resists oxidation—does not tarnish or turn black. It is comparatively soft, and consequently lends itself easily to the work of the artist, who uses it in making jewelry, ornaments and other objects of luxury and beauty. It is easily coined into money, and because of its weight, texture and elemental nature is one of the most difficult metals to counterfeit successfully.

Gold has probably caused more happiness and more misery, more wars, more admirable industry, more terrible crime, more conquests, voyages and epics than any other material substance in the universe.

It has stood as the symbol for everything that is good and everything that is evil in the human heart. As the golden calf which the Hebrews worshipped in the early chapters of the Bible, it stands for the Mammon of Unrighteousness, and in the latter church symbology based on the Book of Revelations, Heaven itself has streets paved with gold, the symbol of brightness and joy.

Literature is full of it—the classic story of Jason and the Golden Fleece, the Golden Apples of the Hesperides, the story of how Jupiter transformed himself into a shower of gold to win a mortal woman—the Danae.

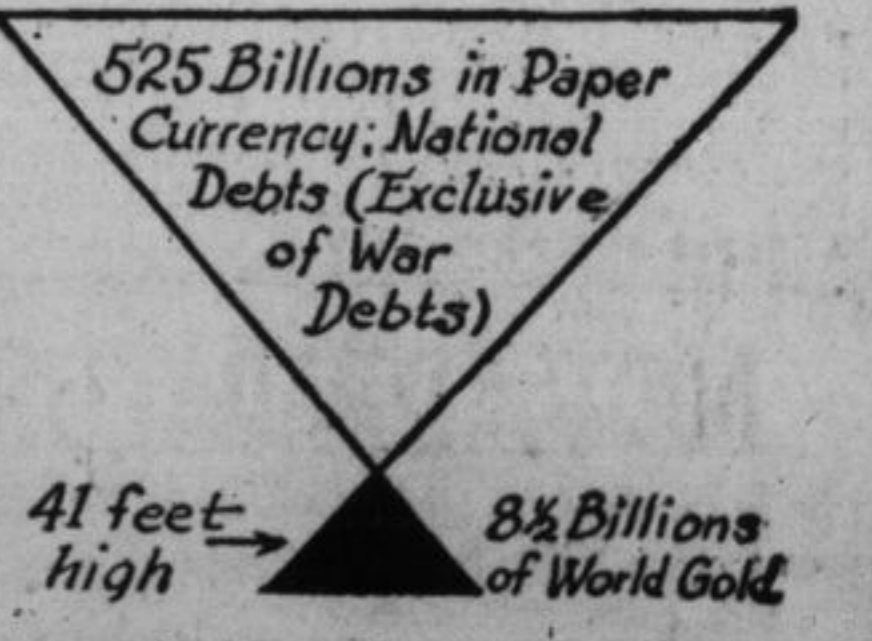
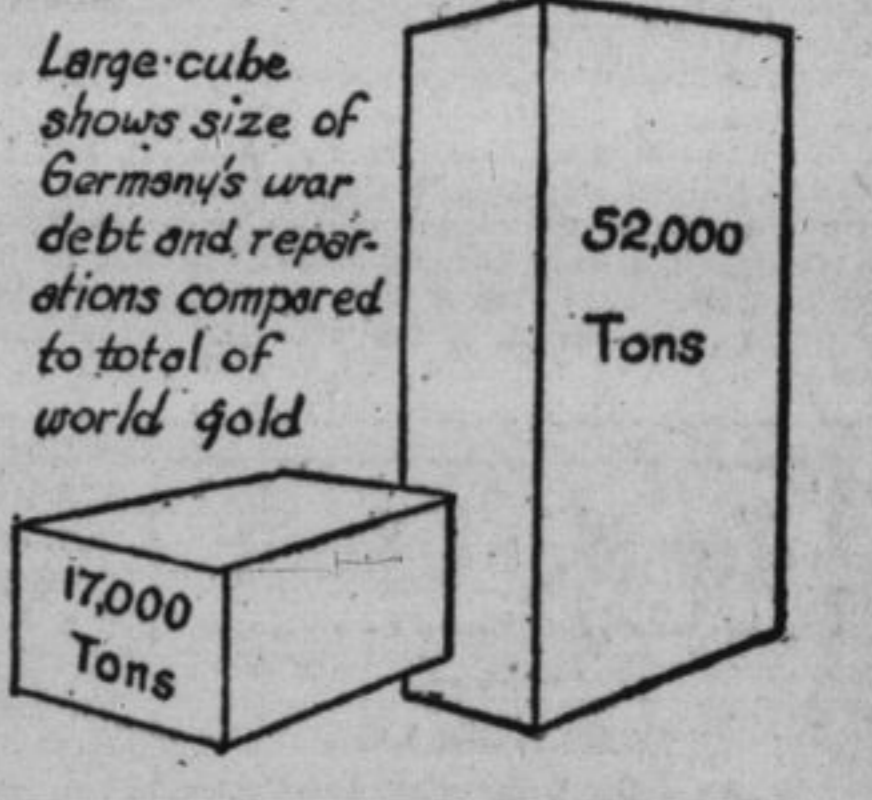
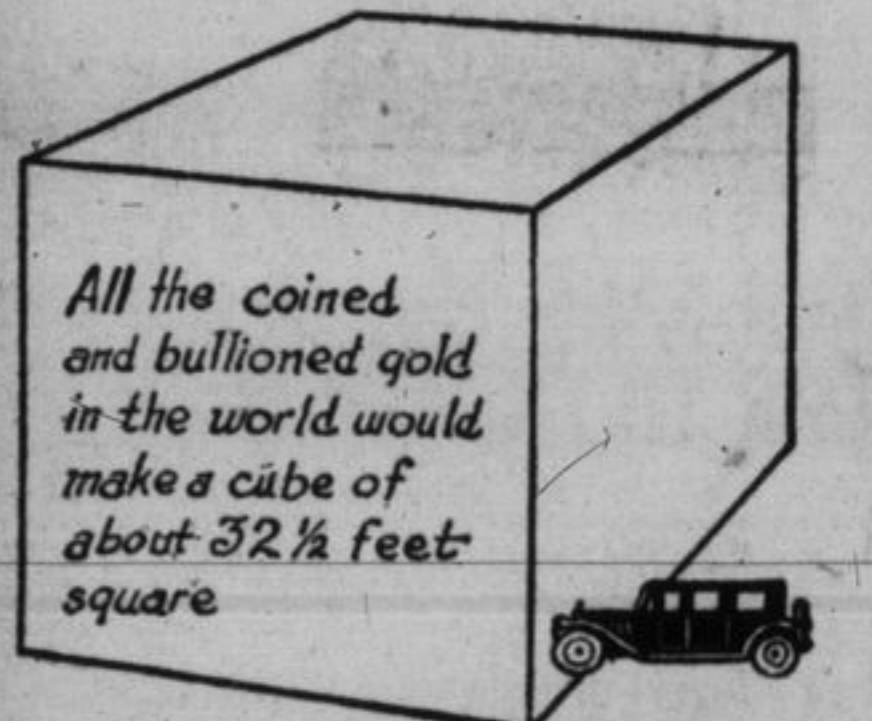
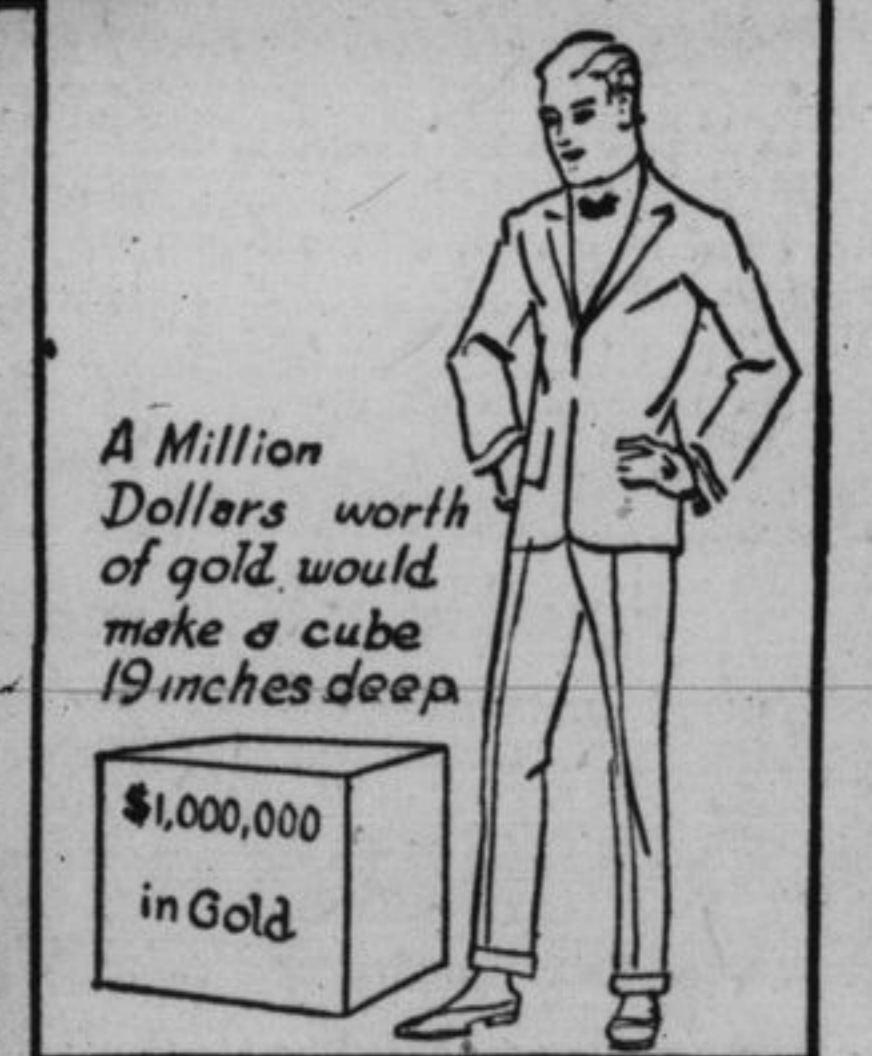
It was gold—the hope of gold from India—that sent Columbus across a trackless ocean to discover a new world, and it was the gold of Ferdinand and Isabella

that made possible the undertaking. And it is this bright, yellow gold, this strange metal which has been so interlocked with tragedies and the progress of the world alike, that German chemists, backed by their Government, are secretly trying to manufacture in their laboratories. Such experiments are older than chemistry itself. They began with the alchemists in the early Middle Ages—when science and black magic were akin.

Hermes Trismegistus, Nostradamus, Cagliostro—half the magicians and necromancers of early Europe—tried with the combined aid of science and the devil, to wrest from nature the secret of the imaginary "philosopher's stone," which was to transmute lead and the baser metals into gold. Some of these went to terrible lengths in their magical experiments. Dumas the Elder tells of how Joseph Balsamo, locked in the depths of his mediaeval laboratory and following advice which he believed came from the spirit world, murdered a beautiful maiden and poured her blood into a mixture of molten metal. Michelet, in his chronicles of early France, tells of even more horrible crimes, and suggests that Gilles de Retz, the monster who was the original of the "Bluebeard" in the fairy tale, and who actually murdered scores of girls and little children, may have been one of these alchemist-magicians.

Until the announcement was made to the world recently that Germany was trying to succeed with real chemistry and science where alchemy and black magic had failed, there was no record that any modern scientist had ever seriously undertaken to make synthetic gold, or believed that such an operation was possible.

Since the announcement was made leading chemists and scientists of nearly every country outside Germany have declared their belief that the thing was absolutely impossible, but the scientific correspondent of the London Times, himself a man of considerable scientific prestige, is not so sure that it is "impossible." "It is dangerous," he says in a recent issue of the British newspaper, "to deny the possibility of any achievement of science, though I do not know of any existing knowledge which suggests that a chemist can transmute the baser metals into gold." This expert suggests that if the Ger-



man synthetic chemists actually have discovered a formula for making gold, it must be based on the new theory of interatomic energy, and says that "the accomplishment of such a transmutation by means of breaking up matter into atoms mean a 'revaluation of all values' infinitely greater than the profound change it would bring in the standard of money. For it would mean the discovery of a new source of energy far surpassing anything that has ever been available to the world. "If we can tap sub-atomic energy, then everything, from coal and oil to human labor, will assume a new aspect. The world will have to shape a civilization so profoundly different from that which exists now that we shall have more to do than to worry over the German escape from the penalties of foiled ambition. If a pound of clay or chalk becomes as useful as a great coal field or an oil pocket, we shall no longer be concerned with the relative values of printed paper and coined money,"

Bags of Minted Gold in the U. S. Sub-Treasury on Wall Street.

what the great war failed to do—a complete change and readjustment of modern civilization. Germany's pressing reason for interest-