

# RADIUM

*is the  
Magic Wand of Science*

*It will make your dimes grow into  
dollars, invested in the*

**RA-TOR MINING AND MANUFACTURING CO.**

**T**HIS company has been organized for the purpose of expanding a business which has been profitably operated for five years on a small scale and which has grown to such proportions a larger and better plant is necessary to meet the growing demand for our products.

We are in the business of mining and producing Radium, Uranium and other radioactive elements from the ores, and manufacturing and marketing the Ra-Tor Plac, various radioactive cosmetics, radium-luminous novelties, and chemical salts as by-products of the radium business.

A conservative valuation of the assets owned by this company would be \$100,000.00. The property consists of mineral lands bearing valuable deposits of radium. The company owns three mining claims outright and a one-half interest in two more rich claims, with an option on the remaining half.

Several thousand dollars worth of mine work has been done and there is enough ore ready for extraction to keep the new plant operating steadily for a period of three years. The values and refining costs of these ores are given in tabulated form in order to show the tremendous values and profits to be gained in treating and marketing them by the methods of the Ra-Tor Mining and Manufacturing Company. These profits will

seem impossibly great until you consider we are exploiting a new deposit of the most precious of all substances—Radium.

This company also owns the U. S. patent rights to the Ra-Tor Plac, a radium carrying device used medicinally, which has been on the market five years. The demand for the Ra-Tor Plac is steadily increasing in spite of the fact that the manufacturers could not afford to advertise. The Plac has sold on its own merit, simply by being recommended by one satisfied user to another. Sales have increased until our laboratory must be enlarged to supply the demand. The Ra-Tor Plac sells for \$25.00 up to \$125.00, depending on the radium content.

The value of the ore and cost of refining is set forth in the following table. In the new plant, which will be designed to treat one ton of ore per day, the estimated costs are:

Mining and preparation of one ton of 3%  $U^3O^8$  ore.....\$ 55.00

Chemical treatment of one ton of 3%  $U^3O^8$  ore..... 140.00

Total cost per ton.....\$195.00

This one ton of 3% ore would contain:

Radium—7.68 milligrams,  
worth @ \$70.00 per mg.----\$537.60

Uranium oxide—60. pounds,  
worth @ \$2.00 per lb.----- 120.00

Gross value per ton.....\$657.60

Based on an 85% extraction,  
the recovered value is.....\$558.96

Less the total cost of..... 195.00

Yields a net profit per ton of...\$363.96

Or, on a 300 working day basis, a yearly profit of \$109,188.00.

Besides the Radium and Uranium in the ore, two valuable by-products, Ionium and Actinium, would be recovered and utilized commercially by this company at a good profit.

In a plant constructed and operated by the U. S. Bureau of Mines for extracting and refining Radium and Uranium from Colorado carnotite ores, (see Bull. 104) the total cost of construction of a plant of three and one-half tons daily capacity was \$52,453.60, and the total operating cost per ton less than that given in the above table.

The Ra-Tor Mining and Manufacturing Company plans to expend \$15,000.00 in constructing and equipping a plant to treat one ton of ore or concentrates daily. The process used is in large part a secret process developed for this ore, and for obvious reasons none of the details will be divulged.

The whole scientific world is engrossed in the study of Radium and the control of the vast stores of energy contained in all radio-active minerals and compounds. We are moving forward at such a rapid pace under the impetus of scientific thought that any day now the news may be broadcast we have at last found the key to unlock this immense storehouse of atomic energy.

When this discovery is announced—and it certainly will be—the deposits owned by this company will be rated in millions instead of thousands.

SPEC  
Rare  
HD  
9539  
R284  
R28  
1900Z

These substances occur so sparingly in Nature they would immediately become fabulously valuable.

The Ra-Tor Mining and Manufacturing Company is capitalized at Fifty Thousand Dollars, or Fifty Thousand Shares of One Dollar Par Value. We are offering Twenty-five Thousand Shares for sale at par, to provide capital for the expansion of the business and the plan here outlined will be carried out in detail as quickly as possible, and production commenced. On this low capitalization big dividends are assured if our marketing keeps pace with our production. These mines are not old, worked out holes in the ground, but newly opened deposits with valuable ore bodies still intact, and should increase steadily in value over a period of years.

This company is organized and operates under a declaration of trust and is headed by capable chemists familiar with every branch of this intricate business. Every detail of this business is highly specialized and could not be in more competent hands. Albert A. Leach, mining engineer and geologist, is President and General Manager. He is a graduate of the Columbia School of Mines and has held responsible positions up to the time he purchased and began operating mines on his own capital. The Secretary-Treasurer is Francis I. Leach, radium chemist, inventor, and the discoverer of these deposits.

Subscriptions for shares should be addressed to the

**Ra-Tor Mining & Manufacturing Co.,  
Tyrone, New Mexico.**