

KOBOLD

THE TREASURER

*AND A HISTORY OF RAW
MATERIALS IN A NUTSHELL*



LET ME INTRODUCE KOBOLD THE TREASURER, A CREATURE WHO FOR AGES HAS BEEN GUARDING TREASURE HIDDEN UNDER THE GROUND. DUE TO HIS LONGEVITY HE PERFECTLY REMEMBERS THE HISTORY OF OUR PLANET AND EVEN TIMES BEFORE A MAN APPEARED ON IT.

WANDERING WITH HIM IN TIME AND SPACE, YOU WILL KNOW THE HISTORY OF A MAN AND RAW MATERIALS HE USED. YOU WILL SEE HOW PEOPLE HAVE LEARNT TO SEARCH THEM, EXPLOIT THEM AND PROCESS THEM, ON TOP OF THAT YOU WILL ALSO FIND OUT HOW THE APPEARANCE OF OUR PLANET HAS CHANGED AND WHAT PEOPLE WOULD NOT ACHIEVED WITHOUT MINING.



IT ALL BEGAN MILLIONS OF YEARS AGO, BEFORE THE FIRST PEOPLE APPEARED ON THE EARTH...

CARBONIFEROUS
FOREST FULL OF
LYCOPHYTA AND
FERNS – THEY
CREATED HARD COAL
IN MANY EUROPEAN
COUNTRIES.



WARM WATERS OF THE PERMIAN
AND JURASSIC SEAS, FORMERLY
FULL OF AMMONITES, BELEMNITES
AND OTHER CREATURES, GAVE
ORIGIN TO MANY DEPOSITS OF
METAL ORES AND OTHER RAW
MATERIALS IN THE WORLD.



THE HUMAN'S ANCESTORS HAVE BEEN USING THE RESOURCES OF OUR PLANET FOR SEVERAL MILLION YEARS. IT ALL STARTED WITH SIMPLE STONES, WHICH AFTER AN APPROPRIATE PROCESSING, BECAME WEAPONS AND TOOLS OF FIRST HUNTERS. PEOPLE GRADUALLY DEVELOPED THEIR KNOWLEDGE ABOUT FEATURES OF PARTICULAR VARIETIES OF THIS RAW MATERIAL. INITIALLY, ONLY THOSE WERE USED WHICH COULD BE FOUND IN THE NEAR PROXIMITY, HOWEVER, A MAN SOON LEARNT TO DRILL UNDERGROUND CORRIDORS IN ORDER TO MINE THE MOST VALUABLE ONES.



GOLD AND COPPER ARE FIRST METALS KNOWN AND USED BY A MAN. GOLD HAS BEEN ASSOCIATED WITH WEALTH AND LUXURY FOR AGES, WHEREAS WITHOUT COPPER - A METAL HAVING UNUSUAL FEATURES - YOU CANNOT IMAGINE THE DEVELOPMENT OF CIVILISATION.

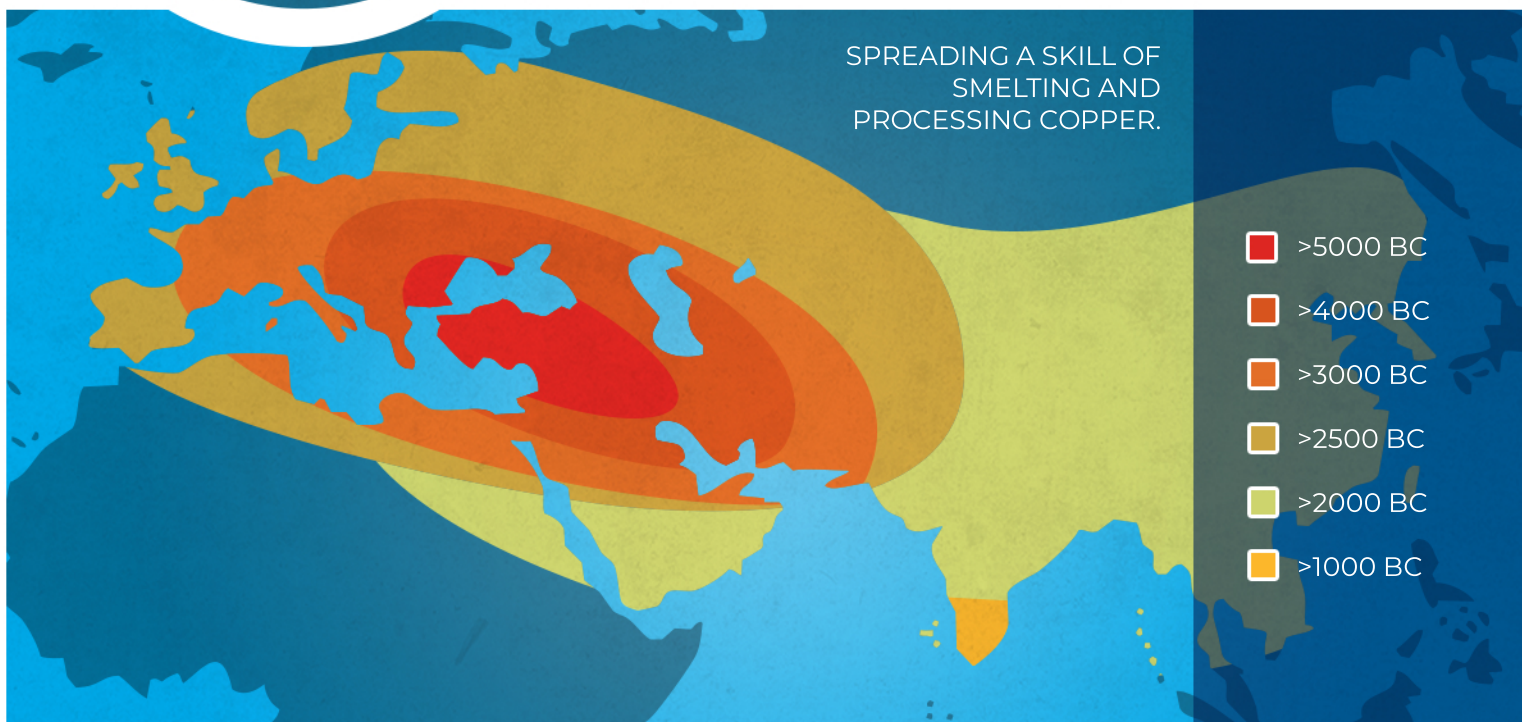
USING FIRE AND SIMPLE TOOLS, BY TRIAL AND ERROR, A MAN STARTED TO MIX COPPER WITH OTHER METALS SUCH AS LEAD, ARSENIC AND TIN. THROUGH LONGSOME EXPERIMENTS, PEOPLE LEARNT TO CAST A WIDE VARIETY OF OBJECTS SUCH AS SIMPLE JEWELLERY, WEAPONS AND TOOLS, LATER ALSO FIGURES, SCULPTURES AND BELLS. THESE ITEMS ARE ASSOCIATED WITH THE DEVELOPMENT OF CULTURE AND TECHNOLOGY.

WE ARE
DISCOVERERS,
WE HAVE NEW
TECHNOLOGIES
NOW...


YES, WELL,
IN A FEW
THOUSAND YEARS
SOMEBODY WILL
CALL IT... OLD
STUFF.



SPREADING A SKILL OF
SMELTING AND
PROCESSING COPPER.



PEOPLE HAVE BEEN SEARCHING FOR NEW RAW MATERIALS FOR AGES, CULTIVATING THEIR SKILLS IN EXPLOITING AND PROCESSING THEM. IT WAS ACCOMPANIED BY THE ADVANCE AND NEW INVENTIONS FOR EXAMPLE USING GUNPOWDER TO CRUSH ROCKS. IN MIDDLE AGES PEOPLE LEARNT HOW TO DRILL DEEP SHAFTS, MULTI-KILOMETRE ADITS AS WELL AS TO BUILD COMPLEX DRAINAGE MACHINES, POWERED BY ANIMALS OR WATER. IN SMELTER PLANTS IRON, GOLD, SILVER, COPPER, LEAD AND TIN WERE SMELTED, QUARRIES AND BRICKYARDS PROVIDED BUILDING MATERIALS AND LIME. NEVERTHELESS, IN MANY CASES A MAN COULD NOT DEFEAT FORCES OF NATURE.



WE'VE ALREADY FOUND A NEW SILVER VEIN. WE ARE GOING TO SET UP A NEW SHAFT!

WE ARE GOING TO BE THE RICHEST MINERS IN FREIBERG SOON!

1168, FREIBERG, PRESENT GERMANY

CONSTRUCTING AND USING A STEAM ENGINE BEGAN A NEW PERIOD IN MINING. THANKS TO IT, DRAINAGE OF FLOODED MINES STARTED TO BE POSSIBLE, AND WIDE USAGE OF HARD COAL AND STEEL PROVIDED FOUNDATION FOR THE INDUSTRIAL REVOLUTION. THESE RAW MATERIALS WERE USED TO BUILD RAILS, SHIPS, BRIDGES AND THE FIRST HIGH-RISE BUILDINGS.



1712, A FIRST STEAM ENGINE DRAINAGE COAL MINE IN ENGLAND

FASTER WAYS OF TRAVELLING HELPED PEOPLE GET TO SO FAR UNKNOWN PLACES IN THE WORLD, DISCOVERING NEW DEPOSITS OF RAW MATERIALS THERE. IN THE 19TH CENTURY GOLD RUSH BROKE OUT REPEATEDLY ALL OVER THE WORLD. A VERY STURDY TROUSERS KNOWN TODAY AS JEANS WERE PRODUCED ESPECIALLY FOR GOLD PROSPECTORS.

IT SEEMS TO ME THAT FROM STANDING IN THIS WATER I WILL GET A FEVER... A GOLD FEVER!!!

1896, SOMEWHERE AT THE KLONDIKE RIVER IN CANADA



IN THE 19TH CENTURY THANKS TO THE DISCOVERY OF OIL AND DEVISING THE METHOD OF ITS PURIFICATION PEOPLE BEGAN NEXT STAGE OF TECHNOLOGY REVOLUTION. A COMBUSTION ENGINE BECAME ITS SYMBOL. IN THE 20TH CENTURY CARS, MOTORBIKES, SHIPS, PLANES, RACKETS WERE ON LAND, IN WATER AND IN THE AIR.



THE 20TH AND 21ST CENTURY BROUGHT AN EXTRAORDINARY DEVELOPMENT. A MAN GOT TO ALL DISTANT CORNERS OF THE WORLD. HE STEPPED ON THE MOON, STARTED CONQUERING THE SPACE. COPPER HAD MANY PRACTICAL APPLICATIONS. METAL IS NOW EXPLOITED BOTH IN HUGE OPEN-PIT MINES VISIBLE FROM THE SPACE AS WELL AS SEVERAL THOUSAND METERS UNDER THE GROUND. IN MINES HUGE MACHINES APPEARED SUCH AS MINING COMBINES, DRILLING RIGS, LOADING MACHINES AND TRUCKS. THANKS TO THEM MINERS' WORK IS FAR EASIER AND SAFER. HOWEVER, ONE THING HAS NOT CHANGED FOR AGES, EXPLOITING NECESSARY RAW MATERIALS REQUIRES A LOT OF EFFORT, CREATIVITY AND THE NEWEST TECHNOLOGY.



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