**RIBA AND PAPER MONEY**

**RIBA IN THE SHARI'AH (THE ISLAMIC LAW)**

Usury or Riba was practiced in some forms in the pre-Islamic era in Arabia, then it was condemned & prohibited by the Quran in one of the most terrifying threats from God to the violators. (Verses # 275-279 of Surat #2 The Cow) & (Verse #130 of Surat #3 Al-Imran). These verses were revealed in the late period of the Madani Quran.

As in all articles of the Sharia, the Quran stated them in a concise way. The Prophet explained and detailed them as much as possible & as needed for the circumstances.

As we know, the Quran & the Sunnah of the Prophet (P.B.U.H.) are the main sources of the Shariah.

The Prophet (P.B.U.H.) instructed his companions to abide and comply with the Shariah in all their rulings, and in case they could not find answers to their problems in the Quran or the Sunnah, they would then have to exert their best efforts (Ijtihad) to develop their own rulings for their contemporary problems according to the Islamic spirit of justice & balance.

Muslim jurists from all times, locations, and different schools of thought followed the same criteria of Ijtihad in all articles of Sharia in order to form new rulings for their contemporary problems which were not specifically dealt with in the Quran or the Sunnah.

As for Riba, the Prophet (P.B.U. H.) defined the scope & the kind of prohibitions in a few Hadiths (Sayings). After the death of the Prophet & with the expansion of the Islamic state into new lands, peoples, and cultures, the companions were faced with new problems. They had to find the proper rulings to address these issues through their Ijtihad.

Umar Ibn Alkhattab said at one time "we wished that we had more light from the Prophet about the Riba, Khilafah & Kalalah ".

Later when jurists from all different schools of thought looked into the article of Riba in both sources of Shariah in
ORDER TO DEVELOP THEIR CONTEMPORARY RULINGS, THEY ALL FOUND
THAT ONE HADEETH OF THE PROPHET (P.B.O.H.) STANDS OUT MORE THAN
OTHER SAYINGS TO DEFINE MOST OF THE SCOPE AND KINDS OF RIBA. THE
HADEETH SAYS:

(EXCHANGE) GOLD FOR GOLD, SILVER FOR SILVER, WHEAT FOR
WHEAT, BARLEY FOR BARLEY, DATES FOR DATES, SALT FOR SALT,
SIMILAR TO SIMILAR, HAND TO HAND. HE WHO GIVES OR TAKES MORE
INCURS RIBA, THE GIVER & THE TAKER ARE EQUAL (USURERS)
(NARRATED BY MUSLIM & AHMAD).

IN ANOTHER NARRATION BY MUSLIM IT WAS ADDED: SHOULD THE
KINDS (OF COMMODITIES) DIFFER, THEN EXCHANGE AS YOU WISH
PROVIDED THAT THE EXCHANGE IS HAND TO HAND.

IT SEEMS THAT THE HADEETH HAS DEFINED THE FOLLOWING ITEMS,

1) DEFINED SIX KINDS OF COMMODITIES THAT WERE ESSENTIAL, AND
COMMONLY USED & UTILIZED IN THEIR LIVES. (THE SIX RIBAWY)
2) DEFINED A SPECIAL SYSTEM IN DEALING WITH THESE COMMODITIES.
3) IN CASE THESE COMMODITIES ARE BARTERED, SOLD OR BOUGHT WITH
EACH OTHER, (e.g. GOLD WITH SILVER OR GOLD WITH WHEAT OR
WHEAT WITH BARLEY) THEN THE DEALING WOULD BE UP TO THE WILL
& THE AGREEMENT OF THE TWO DEALING PARTIES WITH THE
INCREASE OF ONE SIDE OVER THE OTHER AS LONG AS THE DEAL IS
DONE HAND TO HAND.
4) IF THEY ARE BARTERED, SOLD OR BOUGHT WITH THE SAME
COMMODITY (e.g. GOLD WITH GOLD OR SILVER WITH SILVER OR
WHEAT WITH WHEAT…. etc. THEN RESTRICTIONS IN THE HADEETH
MUST BE APPLIED AS FOLLOWS.
   A) EQUALITY IN THE QUALITY.
   B) EQUALITY IN THE VOLUME OR WEIGHT.
   C) THE EXCHANGE HAS TO BE HAND TO HAND IN THE SAME TIME,
   WITHOUT DELAY IN GIVING & TAKING.
   D) ANY INCREASE OF ONE SIDE OVER THE OTHER BECAUSE OF
DIFFERENCE IN THE QUALITY WOULD BE RIBA. (RIBA ALFADHL)
   AS THE PROPHET EMPHASIZED THIS CONCEPT WHEN A COMPANION
   BROUGHT TO HIM AN EXCELLENT KIND OF DATES FROM KHAIBER.
   THE PROPHET (P.B.O.H.) ASKED ARE ALL THE DATES OF KHAIBER
   LIKE THIS? THE MAN SAID NO, BUT WE BARTER ONE SAA’ OF THIS
   DATES FOR TWO SAAS OF OURS. THE PROPHET SAID: DO NOT DO
   THAT, BUT SELL YOUR DATES FOR MONEY, AND BUY THESE GOOD
   DATES WITH THAT MONEY. (NARRATED BE BUKHARY)
   IN ANOTHER SIMILAR HADEETH, THE PROPHET SAID, THIS KIND OF
BARTERING IS RIBA.
   E) ANY INCREASE OF ONE SIDE OVER THE OTHER BECAUSE OF DELAY
IN THE TIME OF PAYMENT OR EXCHANGE OF COMMODITIES WOULD BE RIBA (RIBA ALNASE'AH)
THE PROPHET (P.B.O.H.) EMPHACISED THIS CONCEPT WHEN HE SAID, (INDEED THE RIBA IS IN THE NASEE'AH) I.E. BECAUSE THE INCREASE FOR DELAY IN PAYMENT.

IT IS PROPER AT THIS POINT TO MENTION THE CONCEPT OF INCREASING THE PRICE OF MERCHANDISE BECAUSE OF DELAYED PAYMENT OR PAYING IN INSTALLMENTS OVER A PERIOD OF TIME. 

SHAIKH DR.YUSUF ALQURADHAWY IN HIS BOOK (LAWFUL & UNLAWFUL) SAID THIS IS LAWFUL ACCORDING TO THE OPINONS OF MANY JURISTS, BUT SOME JURISTS CONSIDER THIS IS UNLAWFUL. (OF COURSE THIS IS TO BE UNDERSTOOD THAT THESE DEALINGS ARE NOT INVOLVING THE SIX COMMODITIES MENTIONED IN THE PROPHET'S HADEETH.

IT APPEARS THAT THE PROPHET (P.B.O.H.) DEFINED THESE SIX ESSENTIAL COMMODITIES TO BE REFERENCE LINES EACH ON ITS OWN, i.e. SIX YARD STICKS, EACH ONE MAY BE USED TO PRICE OTHER COMMODITIES EXCEPT ITS OWN KIND, IN OTHER WORDS, WE CAN NOT PRICE GOLD BY GOLD OR WHEAT BY WHEAT EVEN IF THE EXCHANGED QUALITIES ARE DIFFERENT…etc.

RULINGS OF RIBA IN THE SCHOOLS OF THOUGHT

THE MUSLIM JURISTS OF ALL SCHOOLS OF THOUGHT EXTENSIVELY STUDIED & ANALYZED THIS HADEETH IN ORDER TO DEVELOP THEIR RULINGS FOR SOLVING THEIR CONTEMPORARY PROBLEMS.
THEIR RULINGS MAY BE BRIEFLY SUMMARIZED AS FOLLOWS:

1) THE HANAFI, THE HANBALI & THE SHI'A SCHOOLS OF THOUGHT
(REF. FIQUH OF THE FOUR SCHOOLS OF THOUGHT BY ALSHAIKH ABDUL-RAHMAN ALGAZIRI)
THEY DIVIDED THE SIX COMMODITIES INTO 2 GROUPS:

A) COMMODITIES THAT ARE MEASURED BY WEIGHT SUCH AS GOLD & SILVER.
B) COMMODITIES THAT ARE MEASURED BY VOLUME SUCH AS WHEAT, BARLEY, DATES & SALT.

THEY RULED THAT RIBA APPLIES ONLY TO COMMODITIES THAT FALL UNDER THESE TWO GROUPS AND BY ANALOGY, THEY ADDED OTHER COMMODITIES THAT CAN BE MEASURED BY WEIGHT OR VOLUME SUCH AS RICE, BEANS, SEEDS, IRON, RAISINS, COPPER, etc… THEY EXEMPTED FROM RIBA ALL OTHER COMMODITIES THAT ARE NOT MEASURED BY WEIGHT OR VOLUME, SUCH AS BRICKS, EGGS, CLOTH, SWORDS, TOOLS, etc…
THE HANAFI SCHOOL EXEMPTED FROM RIBA THE MONEY THAT IS MADE OF MATERIALS OTHER THAN GOLD & SILVER CALLED (FLOOS) & SAID, "IT IS ACCEPTABLE FOR EXAMPLE TO EXCHANGE TWENTY PIASTRES (OR TWENTY DIMES) WITH FIFTY HALF PIASTRES (OR FIFTY HALF NICKELS) TO BE PAID ON A LATER DAY. (REF. FIQH BY THE FOUR SCHOOLS OF THOUGHT, BY ABDUL-RAHM AN ALGAZIRI, VOL. 2, SECTION OF SELLING & EXCHANGE)

THE HANBALI SCHOOL OF THOUGHT EXEMPTED THE MONEY THAT IS MADE OF MATERIALS OTHER THAN GOLD & SILVER (FLOOS) FROM RIBA& SAID IT IS ACCEPTABLE TO BUY THIRTY PIASTRES FOR FOURTY PIASTRES (2 RIALS) TO BE PAID ON A LATER DAY.

2) THE SHAFI & MALIKI SCHOOLS OF THOUGHT

DIVIDED THE SIX COMMODITIES INTO TWO GROUPS:

A) MONEY ( NOQUOOD - MADE OF GOLD & SILVER )
B) FOOD ( STABLE COMMODITIES )

THEY RULED THAT RIBA APPLIES ONLY TO COMMODITIES THAT FALL UNDER THESE 2 GROUPS AND BY ANALOGY, THEY ADDED OTHER COMMODITIES SUCH AS RICE, BEANS, and CORN

THEY EXEMPTED FROM RIBA ALL OTHER COMMODITIES THAT ARE NOT FOOD STABLE OR NOQUOOD?

THE SHAFI SCHOOL SAID ABOUT THE MONEY THAT IS MADE OF MATERIALS OTHER THAN GOLD & SILVER (FLOOS), THERE IS NO RIBA IN THEM, SO IT IS ACCEPTABLE TO SELL TWENTY PIASTRES FOR FIFTY HALF PIASTRES TO BE PAID AFTER ONE MONTH.

THE MALIKI SCHOOL SAID THE FLOOS THAT IS MADE OF METALS OTHER THAN GOLD & SILVER IS LIKE TRADE MERCHANDISE, AND THERE IS NO RIBA IN THEY.

3) THE ZAHIRI SCHOOL STATED THAT RIBA APPLIES ONLY TO THE 6 COMMODITIES MENTIONED IN THE HADEETH OF THE PROPHET (P.B.U.H.), AND SHOULD NOT BE APPLIED TO OTHER COMMODITIES

NOTE IT IS OBVIOUS FROM THE SAYINGS OF THE PROPHET & THE RULINGS OF DIFFERENT JURISTS THAT MONEY IN ISLAM IS MEANT TO BE FROM GOLD & SILVER AS A TANGIBLE COMMODOTY THAT MAY BE USED AS A MEASURE (YARD STICK) FOR PRICING OTHER COMMODITIES &
HENCE IT SHOULD BE EXCHANGED IN EQUIVALENT KIND, QUALITY & WEIGHT IN ORDER TO AVOID ANY TAMPERING WITH THE YARD STICK, THAT IS TO SAY TO KEEP & MAINTAIN THE MEASURING STANDARD IN TACT. THE PROPHET PICKED ALSO FOUR OTHER COMMODITIES THAT MAY BE USED AS MEASURES OR YARDSTICKS. THESE COMMODITIES WERE THE MOST COMMON & MOST UTILIZED IN THAT TIME AS MONEY & FOOD STABLES. IT WAS NOT STRANGE TO PAY WAGES WITH COMMODITIES & THE ROMAN EMPIRE FOR SOME TIME USED TO PAY THE SALARY OF ITS SOLDIERS BY SALT. THE WORD SALARY, IN FACT WAS EXTRACTED FROM SALT.

WHEN THE ISLAMIC STATE EXPANDED BEYOND ARABIA & JURISTS WERE EXPOSED TO DIFFERENT ENVIRONMENTS, ECONOMIES & CULTURES THAT WERE UTILIZING MANY OTHER ESSENTIAL COMMODITIES THAT WERE NOT KNOWN IN ARABIA, THE JURISTS USED THE ANALOGY CRITERIA TO ADD OTHER COMMODITIES TO THE SIX IDENTIFIED BY THE PROPHET.

MUSLIMS CONTINUED FOR CENTURIES TO APPLY ALL THESE RULINGS OF THE DIFFERENT SCHOOLS OF THOUGHT IN THEIR DEALINGS DEPENDING ON THEIR LOCATIONS AND TIMES.

AS LONG AS MUSLIMS WERE USING THE GOLD DINAR & THE SILVER DIRHAM AS THEIR MONEY, THEY CONTINUED TO AVOID RIBA IN THEIR DEALINGS & TRADES. THEY PROSPERED AND THEIR ECONOMIES & THEIR GOLDEN DINAR WERE STABLE FOR CENTRIES.

DAVID FRIEDMAN, PROFESSOR IN THE LAW SCHOOL & ECONOMICS DEPARTMENT AT SANTA CLARA UNIVERSITY IN HIS PAPER (GOLD, PAPER, OR...IS THERE A BETTER MONEY?) … SAID: -

I QUOTE, "SUCH INTERNATIONAL MONIES HAVE SOMETIMES MAINTAINED THEIR WEIGHT & FINENESS FOR SEVERAL CENTURIES. EXAMPLE WOULD BE THE BYZANTINE NOUMISMA AND THE ARABIC DINAR DURING THE MIDDLE AGES " END QUOTE
THE BIG GAME OF PAPER MONEY

WHEN PAPER MONEY WAS INTRODUCED INTO THE WORLD ECONOMY TO REPLACE GOLD & SILVER MONEY, THE MUSLIM JURISTS WERE FACED WITH A NEW PROBLEM THAT CAUSED A COSIDERABLE AMOUNT OF DEBATES & DIFFERENT OPINIONS.

THE JURIST ABDULLAH IBN ABDULLRAHMAN AAL BASSAM SAID IN HIS BOOK (TAYSEER AL-ALLAM - SHARHI UMDAT AL-AHKAM) I QUOTE, "RECENTLY BANKNOTES WERE INTRODUCED INTO THE MARKETS TO BE USED AS MONEY INSTEAD OF GOLD & SILVER COINS. THEY MADE FOR EACH COIN A CORRESPONDING PIECE OF PAPER THAT CARRIES ITS NAME & VALUE. THE DIFFERENT OPINIONS OF JURISTS MAY BE SUMMARIZED AS FOLLOWS:

1) SOME JURISTS SAID IT IS ABSOLUTELY UNLAWFUL TO DEAL WITH PAPER MONEY BECAUSE IT RESEMBLES THE SELLING OF DEBTS OR RECEIPTS OF DEBTS. (ON THE ISSUING BANK)

2) SOME OTHER JURISTS SAID WE SHOULD DEAL WITH IT AS WE DEAL IN TRADE COMMODITIES & THEREFORE THERE IS NO RIBA IN DEALING IN THEM WITH INCREASE EITHER HAND TO HAND OR INCREASE FOR THE DELIVERED PAYMENT.

3) SOME OTHER JURISTS SAID WE SHOULD DEAL WITH IT AS WE DEAL IN GOLD & SILVER, BECAUSE THE PAPER MONEY IS REPLACABLE WITH GOLD & SILVER (ON DEMAND FROM THE ISSUING BANK)

4) SOME OTHER JURISTS SAID WE SHOULD DEAL WITH IT AS WE DEAL WITH FLOOS. "END QUOTE.

NOTE:
ALL THESE RULINGS WERE BASED ON THE PREMISE THAT THE PAPER MONEY WOULD BE BACKED AND COVERED BY GOLD OR SILVER & WOULD BE EXCHANGEABLE WITH GOLD OR SILVER ON DEMAND FOR THE AMOUNT PRESCRIBED ON THEM.

FACING THE REALITIES OF THAT TIME & BECAUSE OF THE WEAK SITUATION OF THE MUSLIMS IN THE FCE OF OTHER WORLD POWERS, MUSLIMS HAD NO CHOICE BUT TO ACCEPT THE CHANGE TO THE NEW MONETARY SYSTEM AND AS LONG AS PAPER MONEY WAS BACKED & COVERED WITH AN AMOUNT OF GOLD EQUIVALENT TO THE AMOUNT PRESCRIBED ON THEM, THE SYSTEM CONTINUED TO WORK FAIRLY WELL.

THAT WAS THE START OF THE GAME.
PAPER MONEY GAVE THE DIFFERENT GOVERNMENTS THE FREEDOM TO SPEND MORE THAN THEY TOOK IN. THIS POWER WAS EXPLOITED AND
STILL IS BY MANY GOVERNMENTS, ESPECIALLY IN TIMES OF WAR AND CORRUPTION. BY PRINTING, MORE MONEY & FLOOD THE MARKETS WITH IT. AND THE PURCHASING POWER OF MONEY GOES DOWN, AND GOVERNMENTS HAVE TO REDUCE THE PERCENTAGE OF GOLD COVERING TO THE PAPER MONEY. THIS HAPPENED IN MANY COUNTRIES INCLUDING THE UNITED STATES.

CONGRESS MAN DR. RON PAUL SAID IN HIS BOOK (GOLD, PEACE AND PROSPERITY- THE BIRTH OF A NEW CURRENCY) I QUOTE,

" TO FINANCE OUR REVOLUTIONARY WAR, THE CONTINENTAL CONGRESS ISSUED PAPER MONEY IN GREAT QUANTITIES. OVER A PERIOD OF ABOUT FOUR AND A HALF YEARS, THE CONTINENTAL CURRENCY FELL FROM A VALUE OF ONE PAPER DOLLAR PER ONE GOLD DOLLAR TO ABOUT 1000 TO ONE...THE PHRASE --NOT WORTH A CONTINENTAL -- RECORDS THE FATE OF THIS PAPER MONEY."

IN 1913, THE GOLD COVER FOR FEDERAL RESERVE NOTES WAS SET BY 1913 LAW TO BE 40%

IN 1945, THE GOLD RESERVES AGAINST FEDERAL RESERVE NOTES WAS REDUCED TO 25%.

FORTY-FOUR NATIONS AGREED TO THE ESTABLISHMENT OF A WORLD BANK & AN INTERNATIONAL MONETARY FUND, WHICH BEGAN ITS OPERATIONS IN 1946 UNDER A "NEW" GOLD EXCHANGE STD. THIS PERMITTED DOLLARS -(SAID TO BE AS GOOD AS GOLD)-TO BE SUBSTITUTED FOR GOLD AS THE INTERNATIONAL RESERVE CURRENCY. THE DOLLAR VALUED AT 1/35th OF AN OUNCE OF GOLD WAS TO BE HONORED IN PAYMENT OF INTERNATIONAL DEBTS.

TO CONTINUE THE INFLATION FRAUD, THIS FIGURE (THE 25%) HAD TO BE REDUCED TO ZERO.

IN 1965 GOLD RESERVE SYSTEM REQUIREMENTS FOR FEDERAL RESERVE DEPOSIT LIABILITIES WERE REMOVED, AND ON AUGUST 15, 1971, PRESIDENT NIXON CLOSED THE GOLD WINDOW, AND REFUSED TO REDEEM OVERSEAS DOLLARS FOR GOLD.

THE ROAD TO RAMPANT INFLATION WAS OPENED, TO THE DELIGHT OF THE BUREAUCRATS, POLITICIANS, INTERNATIONAL BANKERS, MULTINATIONAL CORPORATIONS, AND SOME LABOR LEADERS. THE AGE OF THE MANAGED FIAT CURRENCY WAS BORN.

THE British Empire WAS EVEN AHEAD OF THE U.S.A. IN THIS RESPECT. BRITAIN ABANDONED THE GOLD STANDARD IN 1931 (40 YRS. BEFORE U.S.)
GOING BACK TO THE HADEETH OF THE PROPHET (P.B.O.H.) THAT EMPHASIZED THE DEALING IN TANGIBLE COMMODITIES WITH DEFINED MEASURABLE WEIGHTS OR VOLUMES THAT KEEP THEIR INTRNSIC VALUES THROUGH TIME … IF NOT GOLD & SILVER, IT MAY BE WHEAT & BARLEY OR BY ANALOGY OIL, CORN, RUBBER, STEEL …ETC.

RON PAUL IN HIS BOOK SAID, FOR TEN CENTURIES THE BYZANTINE COINS WERE ACCEPTED ALL OVER THE WORLD. THE BYZANTINE EMPIRE ONLY DECLINED WHEN IT DEBASED ITS GOLD COIN (THE BYZANT) BY ADDING CHEAP ALLOYS TO THE GOLD.

PAPER MONEY GAVE THE OPPORTUNITY TO STRONGER INDUSTRIAL COUNTRIES TO BUY THEIR RAW MATERIALS FROM WEAKER DEVELOPING COUNTRIES WITH PAPER MONEY THAT MAY BE DEVALUATED AT ANY TIME AT THE WILL OF THE STRONGER COUNTRIES AND THE WEAKER ONES LOOSE THE VALUE OF THEIR WEALTH. THE SAME GAME WAS PLAYED WITHIN EACH COUNTRY WHERE THE RICH GETS RICHER BY KEEPING THEIR WEALTH IN REAL ESTATES & INVESTMENTS THAT CAN BENEFIT FROM INFLATION & THE POOR GETS POORER BY LOOSING THE PURCHASING POWER OF THEIR WAGES & SALARIES THAT NEVER CATCH UP WITH INFLATION.

WITH THIS GAME OF PAPER MONEY, MUSLIMS WENT OUT OF THE TRACK OF THEIR ISLAMIC MONETARY SYSTEM AS SET BY THE PROPHET (P.B.O.H.)

THE WORLD POWERS CHANGED THE TRACK & THE DIRECTION OF THE MUSLIMS WHILE THEY WERE ASLEEP. MUSLIMS AT LARGE INCLUDING THEIR JURISTS STILL DEBATE IN THE MINUTE DETAILS OF RIBA, INTERST, AND WHAT IS HALAL AND WHAT IS HARAM WHILE THEIR WHOLE ISLAMIC SYSTEM & TRACK DIRECTION WAS DIVERTED FOR THEM.

MY CONCLUSION IS, NO MATTER WHAT IS DONE NOWADAYS WITH GOOD INTENTIONS TO ABIDE WITH THE ISLAMIC MONETARY SYSTEM AND TO AVOID RIBA, MUSLIMS ARE NOT ESCAPING THE FACT THAT THEY ARE NOT IN THE DRIVER'S SEAT, BUT THEY ARE RIDERS IN A TRAIN THAT IS TAKING THEM AWAY FROM THE PURE ISLAMIC SYSTEM INTO AN AREA THAT IS POLLUTED WITH THE DUST & THE VAPOUR OF RIBA. AS THE PROPHET (P.B.O.H.) SAID

(A TIME WILL CERTAINLY COME OVER PEOPLE WHEN NONE WILL REMAIN WHO WILL NOT DEVOUR RIBA. IF NOT DEVOUR IT, ITS VAPOUR WILL OVERTAKE HIM (ANOTHER NARRATED ITS DUST). REPORTED BY AHMED, ABU DAUD, AND IBN MAJAH.
THE ONLY REMEDY IS BY GOING BACK TO THE ISLAMIC MONETARY SYSTEM OF A GOLD & SILVER STD. OR BY ANALOGY USING OTHER TANGIBLE COMMODITIES SUCH AS WHEAT, OIL, CORN, OR OTHER ESSENTIAL COMMODITIES TO COVER THE VALUE OF PAPER MONEY & GIVE IT A STABLE INTRINSIC VALUE.

MANY POLITICIANS & ECONOMISTS AS DR. RON PAUL ARE CALLING FOR A RETURN TO THE GOLD STD. OF COURSE THERE IS A LOT OF OPPOSITION FROM GOVERNMENTS, BANKERS, AND MULTINATIONAL CORPORATIONS...ETC TO SUCH CHANGE THAT WILL DEPRIVE THEM FROM THE POWERS THEY ENJOY.

MUSLIMS EVERYWHERE SHOULD SUPPORT THIS MOVEMENT OF GOING BACK TO THE GOLD STD. OR EQUIVALENT SUBSTITUTE COMMODITY SUCH AS OIL, STEEL, ETC.