TILDEN

Probably the most corrupt political election occurred on November 7, 1876 with the election of President Rutherford B. Hayes (Republican). He defeated Samuel Jones Tilden (Democrat). Tilden had won the popular vote by 700,000 votes but because of frauds surrounding the electoral college, he was deprived of the high office of President. Actually, both candidates were involved with bribery, election tampering, voter fraud, conspiracy and a host of other goodies. Tilden ran on a law and order ticket that credited him with convicting Boss Tweed and the Tweed Ring in New York City, which controlled the city through Tammany Hall. For two years into Hayes Presidency, the scandals persisted.

SAMUEL JONES TILDEN
From a photograph taken about 1876

With the help of New York Tribune, Republicans finished the Tilden 'honesty' horse. They published the Tilden Ciphers and keys. There were about 400 of them representing substitution and transposition forms. We will revisit the

transposition forms at a later juncture. They represented secret and illegal operations by Tilden's men in Florida, Louisiana, South Carolina and Oregon. The decipherments were done by investigators of the Tribune. Here are two examples and their solution.

GEO. F. RANEY, Tallahassee.

```
P P Y Y E M N S N Y Y Y P I M A S H N S Y Y S S I T E P A A E
N S H N S P E N N S S H N S M M P I Y Y S N P P Y E A A P I E
I S S Y E S H A I N S S S P E E I Y Y S H N Y N S S S Y E P I
A A N Y I T N S S H Y Y S P Y Y P I N S Y Y S S I T E M E I P
I M M E I S S E I Y Y E I S S I T E I E P Y Y P E E I A A S S
I M A A Y E S P N S Y Y I A N S S S E I S S M M P P N S P I N
S S N P I N S I M I M Y Y I T E M Y Y S S P E Y Y M M N S Y Y S
S I T S P Y Y P E E P P P M A A A Y Y P I I T

L' Engle goes up tomorrow.                        Daniel
```

Examination of the message discloses a bipartite alphabet cipher with only ten different letters used. Dividing the messages by twos, assigning arbitrary letters for pairs of letters and performing a triliteral frequency distribution will yield a solution.

```
PP   YY   EM   NS   NY   YY   PI   MA   SH   NS   YY   SS   etc

A    B    C    D    E    B    F    G    H    D    B    I    etc
```

Message reads:

Have Marble and Coyle telegraph for influential men from Delaware and Virginia. Indications of weakening here. Press advantage and watch board.

Here is another Tilden cipher using numerical substitutes:

S. PASCO AND E. M. L'ENGLE

```
84  55  84  25  93  34  82  31  31  75  93  82  77  33  55  42

93  20  93  66  77  66  33  84  66  31  31  93  20  82  33  66

52  48  44  55  42  82  48  89  42  93  31  82  66  75  31  93
                                        DANIEL
```

There were several messages of this type. They disclosed that only 26 different numbers were used. Message reads:

Cocke will be ignored, Eagan called in. Authority reliable.

The Tribune experts gave the following alphabets:

```
AA = O    EN = Y    IT = D    NS = E    PP = H    SS = N
AI = U    EP = C    MA = B    NY = M    SH = L    YE = F
EI = I    IA = K    MM = G    PE = T    SN = P    YI = X
EM = V    IM = S    NN = J    PI = R    SP = W    YY = A
-----------------------------------------------------
20 = D    33 = N    44 = H    62 = X    77 = G    89 = Y
25 = K    34 = W    48 = T    66 = A    82 = I    93 = E
27 = S    39 = P    52 = U    68 = F    84 = C    96 = M
31 = L    42 = R    55 = O    75 = B    87 = V    99 = J
```

William F. Friedman correlated these alphabets with the results being amusing:

```
            H  I  S  P  A  Y  M  E  N  T
            1  2  3  4  5  6  7  8  9  0
          ------------------------------
    H 1 .                                    .
    I 2 .                 K     S        D .
    S 3 .    L     N  W                P    .
    P 4 .       R     H           T       .
    A 5 .       U        O                .
    Y 6 .       X           A     F       .
    M 7 .              B     G            .
    E 8 .       I     C        V     Y    .
    N 9 .          E        M        J    .
    T 0 .                                 .
          ------------------------------
```

The blank squares may have contained proper names and money designations. Key = HISPAYMENT for bribery seems to be appropriate.