FORGING

5.000.006

12.001

42.001

50,005

66,007

34,004

76,006

89,001

90.001

54.011

30.003

43 002

85,0011

25,317,0603*

5,101,0013

12,003

23,0017

55,005

35,005

72.007

44,009

66,0011

54,002

91,001

5,412,004

6.200,007

6.301.0013

6,405,001

6,977,008

7,001,003

7,193,001

58,009

85,002

58,435,086 *

TURNING

5,000,005

5,101,009

5,302,003

5,412,008

5,905,003

6,000,0011

6.200.010

34.0073

41,001

56,006

60.006

75,011

7,009

14.0013

42,003

6.301.001

6,366,006

6,405,005

50.0013

66,007

23,005

55,006

32,0013

13,001

72,008

7,250,012

BORING.

6,445,0051

7,001,0011

6.200,001

All cards should be sent to the office each morning for the day before, w work done the day before, where they are first checked with the time

TURNING (Cont.)

54.020

34.007

92,004

24 0011

30.002

7.285.0021

86,560,187

PLANING.

5.101.008

5.304.004

5,412,004

5,500,007

5,601,001

5,905,007

6,000,0011

6,234,005

6,301,005

6,405,006

7,001,007

7.193.004

7.250.009

76,007

90,006

66,009

7,001

43 0023

8.007

87,007

90,001

79,801,1251*

5,000,004

12,001

50.004

66,009

72.005

90.0013

66,007

5,101,0064

5,412,002

5.905.001

6.234.007

6,301,006

6,407,003

6,600,009

6,808,009

7,001,004

7,193,003

7,250,008

75.568.0893*

5,050,0011

5.101.002

5.123,005

66.007

12.004

55,010

GEAR CUTTING.

MILLING

23,006

32.004

72.005

6,600,010

6,808,008

7,001,005

register, then sorted in their respective operations and listed on a summary sheet, Fig. 5, with an adding machine which lists the hours according to their

Drilling (Cont.)

58.001

85.009

90,809,1333*

5,000,001

5,101,001

5,302,010

5,412,0061

35,002

72.002

5.500.008

5,601,0063

5,905,012

6,000,007

6,200,001

34,002

34,002

89,003

90,008

66.002

30.0041

58.007

85,002

87,001

90,004

78,691,1423*

7,001,011

7,193,002

7,250,008

5.000,003

6,200,0011

6.445.007

7.001.0023

7,193,0063

53,507,0601

25,317,0601

58,435,086

86,560,187

79,801,125

75,568,0893

58,247,083

48,821,0333

30,256,0403

90.809.1333

78,691,1423

53,507,0601

86,013,043

MONDAY, APRIL 6th

TOTALS

76,006

58.001

90.012

CHUCKING.

6,301,001

7.001.005

7.193.0013

7.250,006

12.007

50,008

66,009

23.004

4.007

ERECTING.

GEAR CUT'G (Cont.)

5.302.005

5.412.0003

5,500,0013

6,200,010

32.006

72.004

34,0033

56,007

6,301,0013

6.445.002

7,285,001

58,247,083 *

5,123,004

5,304,004

5,412,002

6,000,010

6,200,0013

54,002

6,445,005

7,001,001

7.250,003

48,821,0333*

SLOTTING.

5,412,003

5,500,007

6,200,010

5,905,0013

\$76,007 \$90,009

7,001,002

30,256,0403*

5,000,004

5.101.007

42.001

66,009

23,002

55,004

32,0013

5,302,0011

5,304,005

5,472,009

5,500,008

5,905,002

6,000,005

6,200,0063

6,301,001

6,445,007

6.600.001

6,808,003

7,001,009

7,250,006

66,007

75.004

54.002

34.0063

30,011

DRILLING

72,001

32,001

GRINDING.

60,005

66,005

75,001

respective numbers. This gives total hours for each operation for the day, as well as the total hours your employees worked. From these summary sheets the time is transferred to a time summary card, Fig. 6, for each order or lot. The hours spent on that number for the day on each operation, such as forging, boring, turning, etc., are recorded here. This summary card shows the total hours on the order to date as well

as the total hours on any separate operation. It is compiled as follows:—
From the time summary sheets, Fig. 5, is checked off, order or job number 7,285, and on the summary card, under week ending April 11th are entered: week chang April Ith are entered:— Forging, 1 1-4; boring, 2; turning, 2 1-4, etc. The entries for Tuesday's sheet are totalled with the previous entries. That is if these were 2 1-4 hours entered under turning for Mon-day, and the summary sheet called for four hours for Tuesday, you would re-cord 6 1-4 hours on the summary card for Tuesday, thus showing 6 1-4 hours total time forging to Tuesday, and so on for the remaining days for that week. Each operation is carried out in like manner. The week's hours are then totalled, giving the total hours to date on that job or order. The next week's entries begin in the same manner and carried through as before, but the total for the previous week are added with second week's totals. summary cards are continued (each card being numbered) until the job is com-The cost of manufacture is then made from the information given.

A glance at this card always indicates the total hours to date of any operation, as well as the total hours on the whole job. Comparisons can also be made with former records at any stage of the the process. Your time cost being always up to date much time and labor is saved when your stock-taking and inventory season arrives.

[These systems will be fully discussed at a later date desirable.]

A Self-Cleaning Pen

The cleaning of a fountain pen has been greatly simplified in the "Swan" model illustrated herewith.

In this pen all that is necessary when it is to be filled is to draw out the adjustment valve a sufficient distance clear, and place the dropper over the point of the pen. The ink is drawn through the feed by gravity. This completely cleanses the pen and the feed by dissolving all particles of thickened ink that may have lodged in the feed.



This arrangement makes it unnecessary to unscrew the nozzle to clean or fill the pen, and saves many inky fin-

The adjustment valve serves a valuable purpose in regulating the flow of ink, which can be made fast or slow according to the needs of the writer. pens are sold in Canada by

Morton, Phillips & Co., Montreal.

Fig.	6Table	Showing	Total	of	Hours o	n Time	Summary	Card.