ARTICLE III.—CASE II.

Addition of Fractions.

Add the following:

1. $\frac{2}{3}, \frac{4}{5}, \frac{5}{6}, \frac{9}{10}, \frac{14}{15}$
2. $\frac{3}{4}, \frac{5}{8}, \frac{7}{12}, \frac{9}{16}, \frac{19}{24}$
3. $\frac{1}{3}, \frac{3}{5}, \frac{5}{6}, \frac{7}{10}, \frac{8}{15}$
4. $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{6}, \frac{1}{8}, \frac{1}{12}, \frac{1}{24}$
5. $\frac{2}{3}, \frac{3}{4}, \frac{5}{6}, \frac{7}{8}, \frac{15}{16}, \frac{23}{24}, \frac{47}{48}$
6. $\frac{3}{4}, \frac{4}{5}, \frac{7}{10}, \frac{5}{12}, \frac{8}{15}, \frac{11}{20}, \frac{17}{30}, \frac{31}{60}$
7. $\frac{3}{8}, \frac{5}{12}, \frac{7}{16}, \frac{13}{24}, \frac{19}{32}, \frac{25}{48}, \frac{47}{96}$
8. $\frac{5}{8}, \frac{7}{9}, \frac{11}{12}, \frac{9}{16}, \frac{13}{18}, \frac{17}{24}, \frac{25}{36}, \frac{43}{48}, \frac{55}{72}$
9. $\frac{2}{5}, \frac{3}{10}, \frac{4}{15}, \frac{8}{25}, \frac{11}{30}, \frac{16}{45}, \frac{19}{50}$
10. $1\frac{5}{8}, \frac{5}{9}, 4\frac{5}{12}, \frac{5}{16}, 7\frac{5}{18}, \frac{5}{24}, 10\frac{5}{32}, \frac{5}{36}, 13\frac{5}{48}, \frac{5}{72}, 16\frac{5}{96}$
11. $\frac{5}{6}, \frac{6}{7}, \frac{8}{9}, \frac{13}{14}, \frac{17}{18}, \frac{20}{21}, \frac{41}{42}, \frac{62}{63}, \frac{101}{126}$
12. $\frac{1}{3}, \frac{1}{5}, \frac{1}{6}, \frac{1}{10}, \frac{1}{15}, \frac{1}{25}, \frac{1}{30}, \frac{1}{50}, \frac{1}{75}, \frac{1}{150}$
13. $\frac{5}{32}, \frac{5}{36}, \frac{5}{40}, \frac{4}{45}, \frac{5}{48}, \frac{7}{60}, \frac{5}{72}, \frac{7}{80}, \frac{7}{120}, \frac{7}{144}, \frac{9}{160}$
14. $3\frac{1}{3}, 3\frac{1}{5}, 3\frac{1}{6}, 3\frac{1}{10}, 3\frac{1}{12}, 3\frac{1}{15}, 3\frac{1}{20}$
15. $2\frac{1}{2}, 2\frac{1}{3}, 2\frac{1}{6}, 2\frac{1}{7}, 2\frac{1}{14}, 2\frac{1}{21}, 2\frac{1}{42}$
16. $7\frac{4}{9}, 8\frac{5}{18}, 9\frac{7}{27}, 10\frac{7}{36}, 11\frac{8}{45}, 12\frac{11}{54}, 13\frac{19}{72}, 14\frac{23}{90}, 15\frac{25}{108}$
17. $1\frac{1}{2}, 1\frac{2}{3}, 1\frac{3}{4}, 1\frac{4}{5}, 1\frac{5}{6}, 1\frac{7}{8}, 1\frac{9}{10}, 1\frac{11}{12}, 1\frac{14}{15}, 1\frac{19}{20}, 1\frac{29}{30}, 1\frac{49}{120}$
18. $1\frac{9}{14}, 2\frac{11}{21}, 3\frac{15}{28}, 4\frac{25}{42}, 5\frac{27}{56}, 6\frac{47}{84}, 7\frac{69}{168}$

19. $1\frac{1}{2}$, $2\frac{2}{3}$, $3\frac{3}{4}$, $4\frac{5}{6}$, $5\frac{4}{9}$, $6\frac{7}{12}$, $7\frac{5}{18}$, $8\frac{16}{27}$, $9\frac{19}{54}$

20. $1\frac{5}{9}$, $3\frac{7}{10}$, $5\frac{5}{12}$, $7\frac{8}{15}$, $9\frac{13}{20}$, $10\frac{17}{80}$, $12\frac{19}{86}$, $14\frac{32}{45}$, $16\frac{53}{60}$, $17\frac{41}{90}$

21. $45\frac{3}{10}$, $50\frac{7}{12}$, $65\frac{4}{15}$, $75\frac{9}{20}$, $85\frac{14}{25}$, $95\frac{17}{80}$, $100\frac{27}{50}$, $105\frac{41}{60}$, $115\frac{26}{75}$, $125\frac{39}{100}$, $135\frac{47}{150}$

22. If $11\frac{9}{16}$ be subtracted from a certain number, $13\frac{4}{5}$ will remain. What is the number?

23. A man spent $\$75\frac{8}{10}$, and then had $\$69\frac{3}{4}$ more than he spent. How much money had he at first?

24. Four loads of barley measured as follows: $35\frac{5}{8}$ bu., $33\frac{7}{16}$ bu., $36\frac{9}{32}$ bu., and $34\frac{17}{64}$ bu. How many bushels were there in all?

25. By selling a lot of tobacco for $\$256\frac{16}{25}$, I lost $\$32\frac{2}{5}$. For how much should it have been sold to gain $\$26\frac{28}{50}$?

26. A laborer's earnings for six consecutive months were respectively $\$42\frac{1}{2}$, $\$45\frac{3}{4}$, $\$48\frac{7}{10}$, $\$51\frac{11}{20}$, $\$54\frac{8}{25}$, $\$57\frac{9}{50}$. What was the entire sum?

27. A farmer sowed $7\frac{1}{6}$ acres in wheat, $8\frac{7}{8}$ acres in oats, $9\frac{5}{12}$ acres in rye, $10\frac{9}{16}$ acres in barley, $11\frac{11}{24}$ acres in corn, $12\frac{25}{48}$ acres in hay. How many acres did he own?

28. An engineer surveyed a road as follows: the first week $3\frac{3}{8}$ miles; the second, $4\frac{3}{4}$ miles; the third, $5\frac{4}{5}$ miles; the fourth, $6\frac{5}{6}$ miles; the fifth, $8\frac{9}{10}$ miles; the sixth, $9\frac{11}{12}$ miles; the seventh, $10\frac{2}{15}$ miles. What was the length of the road?

29. A can build $50\frac{2}{3}$ rods of fence in a week; B, $51\frac{3}{4}$ rods; C, $52\frac{5}{6}$ rods; D, $53\frac{8}{9}$ rods; E, $54\frac{11}{12}$ rods; F, $55\frac{17}{18}$ rods. How many rods can all build in a week.

30. Eight loads of hay weighed respectively $1\frac{1}{4}$ tons, $1\frac{2}{5}$ tons, $1\frac{3}{8}$ tons, $1\frac{3}{10}$ tons, $1\frac{7}{20}$ tons, $1\frac{8}{25}$ tons, $1\frac{17}{40}$ tons, $1\frac{19}{50}$ tons. What was the entire weight?

31. Six casks of wine were gauged as follows: $31\frac{1}{8}$ gal., $34\frac{2}{9}$ gal., $33\frac{5}{12}$ gal., $35\frac{7}{16}$ gal., $32\frac{5}{18}$ gal., $33\frac{25}{48}$ gal. What was the total number?

32. A steamship made seven trips across the Atlantic. The first in $13\frac{13}{24}$ days, the second in $12\frac{7}{18}$ days, the third in $11\frac{5}{8}$ days, the fourth in $10\frac{1}{6}$ days, the fifth in $9\frac{5}{12}$ days, the sixth in $8\frac{8}{9}$ days, the seventh in $7\frac{11}{36}$ days. In how many days were the seven trips made?

33. Five cars of wheat contained respectively $400\frac{1}{2}$ bu., $422\frac{2}{5}$ bu., $437\frac{5}{8}$ bu., $445\frac{9}{10}$ bu., $451\frac{5}{6}$ bu. They were sold for $\$333\frac{3}{4}$, $\$369\frac{3}{5}$, $\$364\frac{11}{16}$, $\$408\frac{37}{40}$, and $\$406\frac{13}{20}$. How many bushels were there, and what was the total value?

34. Four miners dug the following quantities of gold: The first dug $18\frac{9}{10}$ oz.; the second, $2\frac{5}{8}$ oz. more than the first; the third, $2\frac{3}{20}$ oz. more than the second; and the fourth, $2\frac{19}{40}$ oz. more than the third. How much did they dig altogether?

ANSWERS.

ARTICLE 111.

1. $4\frac{2}{15}$
2. $3\frac{5}{16}$
3. 3.
4. $1\frac{1}{2}$
5. 6.
6. $4\frac{5}{6}$
7. $3\frac{3}{8}$
8. $6\frac{2}{3}$
9. $2\frac{7}{18}$
10. $53\frac{11}{12}$
11. $8\frac{1}{6}$
12. $\frac{49}{50}$
13. 1.
14. 22.
15. $15\frac{2}{7}$
16. $101\frac{37}{120}$
17. $21\frac{1}{2}$
18. $31\frac{3}{4}$
19. 50.
20. 100.
21. 1000.
22. $25\frac{29}{80}$
23. $\$220\frac{7}{20}$
24. $139\frac{39}{64}$ bu.
25. $\$315\frac{1}{2}$
26. $300.
27. 60 A.
28. 50 mi.
29. 320 rds.
30. $10\frac{4}{5}$ T.
31. 200 gal.
32. $73\frac{1}{8}$ da.
33. $2158\frac{81}{120}$ bu. or $\$1883\frac{49}{80}$
34. $90\frac{1}{4}$ oz.