



Udgaar hvet Lørdag. — Kan bestilles paa ethvert Postkontor i Danmark, Norge og Sverige.

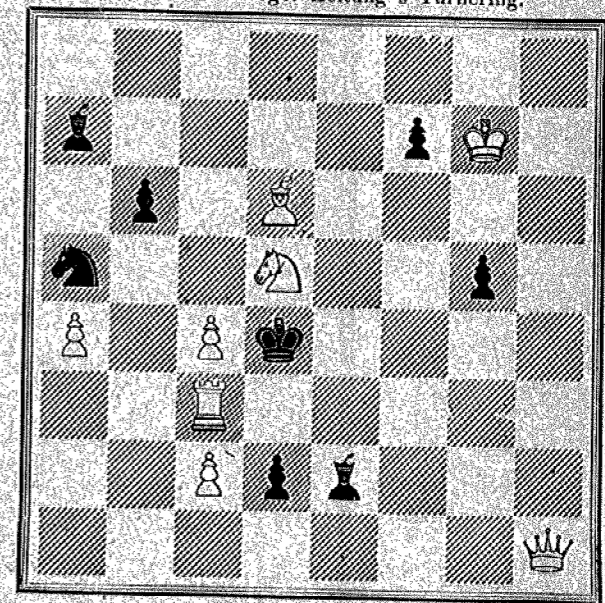
Nr. 38.	Lørdag den 24. September 1898.	Aarg. 4
---------	--------------------------------	---------

Opgaver.

1152. Motto: *Parva sed apta mihi.*

1. Præmie

i „St. Petersburgor Zeitung“s Turnering.



Mat i 3 Træk.

1. $\frac{1}{x^2} = x^{-2}$
 $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

2. $\frac{1}{x^3} = x^{-3}$
 $\frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$

3. $\frac{1}{x^4} = x^{-4}$
 $\frac{d}{dx} x^{-4} = -4x^{-5} = -\frac{4}{x^5}$

4. $\frac{1}{x^5} = x^{-5}$
 $\frac{d}{dx} x^{-5} = -5x^{-6} = -\frac{5}{x^6}$

5. $\frac{1}{x^6} = x^{-6}$
 $\frac{d}{dx} x^{-6} = -6x^{-7} = -\frac{6}{x^7}$

6. $\frac{1}{x^7} = x^{-7}$
 $\frac{d}{dx} x^{-7} = -7x^{-8} = -\frac{7}{x^8}$

7. $\frac{1}{x^8} = x^{-8}$
 $\frac{d}{dx} x^{-8} = -8x^{-9} = -\frac{8}{x^9}$

8. $\frac{1}{x^9} = x^{-9}$
 $\frac{d}{dx} x^{-9} = -9x^{-10} = -\frac{9}{x^{10}}$

9. $\frac{1}{x^{10}} = x^{-10}$
 $\frac{d}{dx} x^{-10} = -10x^{-11} = -\frac{10}{x^{11}}$

10. $\frac{1}{x^{11}} = x^{-11}$
 $\frac{d}{dx} x^{-11} = -11x^{-12} = -\frac{11}{x^{12}}$

11. $\frac{1}{x^{12}} = x^{-12}$
 $\frac{d}{dx} x^{-12} = -12x^{-13} = -\frac{12}{x^{13}}$

12. $\frac{1}{x^{13}} = x^{-13}$
 $\frac{d}{dx} x^{-13} = -13x^{-14} = -\frac{13}{x^{14}}$

13. $\frac{1}{x^{14}} = x^{-14}$
 $\frac{d}{dx} x^{-14} = -14x^{-15} = -\frac{14}{x^{15}}$

14. $\frac{1}{x^{15}} = x^{-15}$
 $\frac{d}{dx} x^{-15} = -15x^{-16} = -\frac{15}{x^{16}}$

15. $\frac{1}{x^{16}} = x^{-16}$
 $\frac{d}{dx} x^{-16} = -16x^{-17} = -\frac{16}{x^{17}}$

16. $\frac{1}{x^{17}} = x^{-17}$
 $\frac{d}{dx} x^{-17} = -17x^{-18} = -\frac{17}{x^{18}}$

17. $\frac{1}{x^{18}} = x^{-18}$
 $\frac{d}{dx} x^{-18} = -18x^{-19} = -\frac{18}{x^{19}}$

18. $\frac{1}{x^{19}} = x^{-19}$
 $\frac{d}{dx} x^{-19} = -19x^{-20} = -\frac{19}{x^{20}}$

19. $\frac{1}{x^{20}} = x^{-20}$
 $\frac{d}{dx} x^{-20} = -20x^{-21} = -\frac{20}{x^{21}}$

20. $\frac{1}{x^{21}} = x^{-21}$
 $\frac{d}{dx} x^{-21} = -21x^{-22} = -\frac{21}{x^{22}}$

21. $\frac{1}{x^{22}} = x^{-22}$
 $\frac{d}{dx} x^{-22} = -22x^{-23} = -\frac{22}{x^{23}}$

22. $\frac{1}{x^{23}} = x^{-23}$
 $\frac{d}{dx} x^{-23} = -23x^{-24} = -\frac{23}{x^{24}}$

23. $\frac{1}{x^{24}} = x^{-24}$
 $\frac{d}{dx} x^{-24} = -24x^{-25} = -\frac{24}{x^{25}}$

24. $\frac{1}{x^{25}} = x^{-25}$
 $\frac{d}{dx} x^{-25} = -25x^{-26} = -\frac{25}{x^{26}}$

25. $\frac{1}{x^{26}} = x^{-26}$
 $\frac{d}{dx} x^{-26} = -26x^{-27} = -\frac{26}{x^{27}}$

26. $\frac{1}{x^{27}} = x^{-27}$
 $\frac{d}{dx} x^{-27} = -27x^{-28} = -\frac{27}{x^{28}}$

27. $\frac{1}{x^{28}} = x^{-28}$
 $\frac{d}{dx} x^{-28} = -28x^{-29} = -\frac{28}{x^{29}}$

28. $\frac{1}{x^{29}} = x^{-29}$
 $\frac{d}{dx} x^{-29} = -29x^{-30} = -\frac{29}{x^{30}}$

29. $\frac{1}{x^{30}} = x^{-30}$
 $\frac{d}{dx} x^{-30} = -30x^{-31} = -\frac{30}{x^{31}}$

30. $\frac{1}{x^{31}} = x^{-31}$
 $\frac{d}{dx} x^{-31} = -31x^{-32} = -\frac{31}{x^{32}}$

31. $\frac{1}{x^{32}} = x^{-32}$
 $\frac{d}{dx} x^{-32} = -32x^{-33} = -\frac{32}{x^{33}}$

32. $\frac{1}{x^{33}} = x^{-33}$
 $\frac{d}{dx} x^{-33} = -33x^{-34} = -\frac{33}{x^{34}}$

33. $\frac{1}{x^{34}} = x^{-34}$
 $\frac{d}{dx} x^{-34} = -34x^{-35} = -\frac{34}{x^{35}}$

34. $\frac{1}{x^{35}} = x^{-35}$
 $\frac{d}{dx} x^{-35} = -35x^{-36} = -\frac{35}{x^{36}}$

35. $\frac{1}{x^{36}} = x^{-36}$
 $\frac{d}{dx} x^{-36} = -36x^{-37} = -\frac{36}{x^{37}}$

36. $\frac{1}{x^{37}} = x^{-37}$
 $\frac{d}{dx} x^{-37} = -37x^{-38} = -\frac{37}{x^{38}}$

37. $\frac{1}{x^{38}} = x^{-38}$
 $\frac{d}{dx} x^{-38} = -38x^{-39} = -\frac{38}{x^{39}}$

38. $\frac{1}{x^{39}} = x^{-39}$
 $\frac{d}{dx} x^{-39} = -39x^{-40} = -\frac{39}{x^{40}}$

39. $\frac{1}{x^{40}} = x^{-40}$
 $\frac{d}{dx} x^{-40} = -40x^{-41} = -\frac{40}{x^{41}}$

40. $\frac{1}{x^{41}} = x^{-41}$
 $\frac{d}{dx} x^{-41} = -41x^{-42} = -\frac{41}{x^{42}}$

41. $\frac{1}{x^{42}} = x^{-42}$
 $\frac{d}{dx} x^{-42} = -42x^{-43} = -\frac{42}{x^{43}}$

42. $\frac{1}{x^{43}} = x^{-43}$
 $\frac{d}{dx} x^{-43} = -43x^{-44} = -\frac{43}{x^{44}}$

43. $\frac{1}{x^{44}} = x^{-44}$
 $\frac{d}{dx} x^{-44} = -44x^{-45} = -\frac{44}{x^{45}}$

44. $\frac{1}{x^{45}} = x^{-45}$
 $\frac{d}{dx} x^{-45} = -45x^{-46} = -\frac{45}{x^{46}}$

45. $\frac{1}{x^{46}} = x^{-46}$
 $\frac{d}{dx} x^{-46} = -46x^{-47} = -\frac{46}{x^{47}}$

46. $\frac{1}{x^{47}} = x^{-47}$
 $\frac{d}{dx} x^{-47} = -47x^{-48} = -\frac{47}{x^{48}}$

47. $\frac{1}{x^{48}} = x^{-48}$
 $\frac{d}{dx} x^{-48} = -48x^{-49} = -\frac{48}{x^{49}}$

48. $\frac{1}{x^{49}} = x^{-49}$
 $\frac{d}{dx} x^{-49} = -49x^{-50} = -\frac{49}{x^{50}}$

49. $\frac{1}{x^{50}} = x^{-50}$
 $\frac{d}{dx} x^{-50} = -50x^{-51} = -\frac{50}{x^{51}}$

50. $\frac{1}{x^{51}} = x^{-51}$
 $\frac{d}{dx} x^{-51} = -51x^{-52} = -\frac{51}{x^{52}}$

51. $\frac{1}{x^{52}} = x^{-52}$
 $\frac{d}{dx} x^{-52} = -52x^{-53} = -\frac{52}{x^{53}}$

52. $\frac{1}{x^{53}} = x^{-53}$
 $\frac{d}{dx} x^{-53} = -53x^{-54} = -\frac{53}{x^{54}}$

53. $\frac{1}{x^{54}} = x^{-54}$
 $\frac{d}{dx} x^{-54} = -54x^{-55} = -\frac{54}{x^{55}}$

54. $\frac{1}{x^{55}} = x^{-55}$
 $\frac{d}{dx} x^{-55} = -55x^{-56} = -\frac{55}{x^{56}}$

55. $\frac{1}{x^{56}} = x^{-56}$
 $\frac{d}{dx} x^{-56} = -56x^{-57} = -\frac{56}{x^{57}}$

56. $\frac{1}{x^{57}} = x^{-57}$
 $\frac{d}{dx} x^{-57} = -57x^{-58} = -\frac{57}{x^{58}}$

57. $\frac{1}{x^{58}} = x^{-58}$
 $\frac{d}{dx} x^{-58} = -58x^{-59} = -\frac{58}{x^{59}}$

58. $\frac{1}{x^{59}} = x^{-59}$
 $\frac{d}{dx} x^{-59} = -59x^{-60} = -\frac{59}{x^{60}}$

59. $\frac{1}{x^{60}} = x^{-60}$
 $\frac{d}{dx} x^{-60} = -60x^{-61} = -\frac{60}{x^{61}}$

60. $\frac{1}{x^{61}} = x^{-61}$
 $\frac{d}{dx} x^{-61} = -61x^{-62} = -\frac{61}{x^{62}}$

61. $\frac{1}{x^{62}} = x^{-62}$
 $\frac{d}{dx} x^{-62} = -62x^{-63} = -\frac{62}{x^{63}}$

62. $\frac{1}{x^{63}} = x^{-63}$
 $\frac{d}{dx} x^{-63} = -63x^{-64} = -\frac{63}{x^{64}}$

63. $\frac{1}{x^{64}} = x^{-64}$
 $\frac{d}{dx} x^{-64} = -64x^{-65} = -\frac{64}{x^{65}}$

64. $\frac{1}{x^{65}} = x^{-65}$
 $\frac{d}{dx} x^{-65} = -65x^{-66} = -\frac{65}{x^{66}}$

65. $\frac{1}{x^{66}} = x^{-66}$
 $\frac{d}{dx} x^{-66} = -66x^{-67} = -\frac{66}{x^{67}}$

66. $\frac{1}{x^{67}} = x^{-67}$
 $\frac{d}{dx} x^{-67} = -67x^{-68} = -\frac{67}{x^{68}}$

67. $\frac{1}{x^{68}} = x^{-68}$
 $\frac{d}{dx} x^{-68} = -68x^{-69} = -\frac{68}{x^{69}}$

68. $\frac{1}{x^{69}} = x^{-69}$
 $\frac{d}{dx} x^{-69} = -69x^{-70} = -\frac{69}{x^{70}}$

69. $\frac{1}{x^{70}} = x^{-70}$
 $\frac{d}{dx} x^{-70} = -70x^{-71} = -\frac{70}{x^{71}}$

70. $\frac{1}{x^{71}} = x^{-71}$
 $\frac{d}{dx} x^{-71} = -71x^{-72} = -\frac{71}{x^{72}}$

71. $\frac{1}{x^{72}} = x^{-72}$
 $\frac{d}{dx} x^{-72} = -72x^{-73} = -\frac{72}{x^{73}}$

72. $\frac{1}{x^{73}} = x^{-73}$
 $\frac{d}{dx} x^{-73} = -73x^{-74} = -\frac{73}{x^{74}}$

73. $\frac{1}{x^{74}} = x^{-74}$
 $\frac{d}{dx} x^{-74} = -74x^{-75} = -\frac{74}{x^{75}}$

74. $\frac{1}{x^{75}} = x^{-75}$
 $\frac{d}{dx} x^{-75} = -75x^{-76} = -\frac{75}{x^{76}}$

75. $\frac{1}{x^{76}} = x^{-76}$
 $\frac{d}{dx} x^{-76} = -76x^{-77} = -\frac{76}{x^{77}}$

76. $\frac{1}{x^{77}} = x^{-77}$
 $\frac{d}{dx} x^{-77} = -77x^{-78} = -\frac{77}{x^{78}}$

77. $\frac{1}{x^{78}} = x^{-78}$
 $\frac{d}{dx} x^{-78} = -78x^{-79} = -\frac{78}{x^{79}}$

78. $\frac{1}{x^{79}} = x^{-79}$
 $\frac{d}{dx} x^{-79} = -79x^{-80} = -\frac{79}{x^{80}}$

79. $\frac{1}{x^{80}} = x^{-80}$
 $\frac{d}{dx} x^{-80} = -80x^{-81} = -\frac{80}{x^{81}}$

80. $\frac{1}{x^{81}} = x^{-81}$
 $\frac{d}{dx} x^{-81} = -81x^{-82} = -\frac{81}{x^{82}}$

81. $\frac{1}{x^{82}} = x^{-82}$
 $\frac{d}{dx} x^{-82} = -82x^{-83} = -\frac{82}{x^{83}}$

82. $\frac{1}{x^{83}} = x^{-83}$
 $\frac{d}{dx} x^{-83} = -83x^{-84} = -\frac{83}{x^{84}}$

83. $\frac{1}{x^{84}} = x^{-84}$
 $\frac{d}{dx} x^{-84} = -84x^{-85} = -\frac{84}{x^{85}}$

84. $\frac{1}{x^{85}} = x^{-85}$
 $\frac{d}{dx} x^{-85} = -85x^{-86} = -\frac{85}{x^{86}}$

85. $\frac{1}{x^{86}} = x^{-86}$
 $\frac{d}{dx} x^{-86} = -86x^{-87} = -\frac{86}{x^{87}}$

86. $\frac{1}{x^{87}} = x^{-87}$
 $\frac{d}{dx} x^{-87} = -87x^{-88} = -\frac{87}{x^{88}}$

87. $\frac{1}{x^{88}} = x^{-88}$
 $\frac{d}{dx} x^{-88} = -88x^{-89} = -\frac{88}{x^{89}}$

88. $\frac{1}{x^{89}} = x^{-89}$
 $\frac{d}{dx} x^{-89} = -89x^{-90} = -\frac{89}{x^{90}}$

89. $\frac{1}{x^{90}} = x^{-90}$
 $\frac{d}{dx} x^{-90} = -90x^{-91} = -\frac{90}{x^{91}}$

90. $\frac{1}{x^{91}} = x^{-91}$
 $\frac{d}{dx} x^{-91} = -91x^{-92} = -\frac{91}{x^{92}}$

91. $\frac{1}{x^{92}} = x^{-92}$
 $\frac{d}{dx} x^{-92} = -92x^{-93} = -\frac{92}{x^{93}}$

92. $\frac{1}{x^{93}} = x^{-93}$
 $\frac{d}{dx} x^{-93} = -93x^{-94} = -\frac{93}{x^{94}}$

93. $\frac{1}{x^{94}} = x^{-94}$
 $\frac{d}{dx} x^{-94} = -94x^{-95} = -\frac{94}{x^{95}}$

94. $\frac{1}{x^{95}} = x^{-95}$
 $\frac{d}{dx} x^{-95} = -95x^{-96} = -\frac{95}{x^{96}}$

95. $\frac{1}{x^{96}} = x^{-96}$
 $\frac{d}{dx} x^{-96} = -96x^{-97} = -\frac{96}{x^{97}}$

96. $\frac{1}{x^{97}} = x^{-97}$
 $\frac{d}{dx} x^{-97} = -97x^{-98} = -\frac{97}{x^{98}}$

97. $\frac{1}{x^{98}} = x^{-98}$
 $\frac{d}{dx} x^{-98} = -98x^{-99} = -\frac{98}{x^{99}}$

98. $\frac{1}{x^{99}} = x^{-99}$
 $\frac{d}{dx} x^{-99} = -99x^{-100} = -\frac{99}{x^{100}}$

99. $\frac{1}{x^{100}} = x^{-100}$
 $\frac{d}{dx} x^{-100} = -100x^{-101} = -\frac{100}{x^{101}}$

