

[0041] Each of the display parts **21a**, **22a** and **23a** is divided into plural parts corresponding to the number of the disposed symbols. For example, each display is divided into twelve parts for number symbols of "1" to "10" and two blank symbols. Note that the blank symbol is a cell having no symbol. The blank symbols **31a**, **31b** are disposed on the first display part **21a**, the blank symbols **31c**, **31d** are disposed on the second display part **22a**, and the blank symbols **31e**, **31f** are disposed on the third display part **23a**. The blank symbols **31a** to **31f** are transparent so that at least one symbol on the display part behind the blank symbol is observable through the blank symbol. Twelve symbols on the first, second and third display plate parts **21a**, **22a** and **23a**, form a winning line in radial directions (indicated by numerals from **120** to **131** in FIG. 11). Note that the first-third display parts **21a**, **22a** and **23a** may have other symbol type than the number in the above embodiment. Examples of other symbol type are marks, signs, color and pictures. Arrangement and the number of the symbols including the blank symbols on the display parts **21a**, **22a** and **23a** are not limited in the embodiment shown in FIGS. 3, 4 and 5, but may be determined appropriately. Furthermore, though borderlines between the blank symbols and the transparent parts are shown by chain double-dashed lines, it is possible to omit the borderlines.

[0042] The reel mounting plate **24** is disposed behind and concentrically with the first, second and third display plates **21**, **22** and **23**. The sub reel **25** is mounted on the reel mounting plate **24**. The reel mounting plate **24** is rotated when the blank symbols of first, second and third display parts **21a**, **22a** and **23a** is arranged in line on any of winning lines **120** to **131** when the first-third displays **21**, **22** and **23** stop rotating. In addition, the reel mounting plate **24** shifts the sub reel **25** behind the blank symbols on the winning line.

[0043] The sub reel **25** is disposed behind the first, second and third displays **21**, **22** and **23** such that the axial direction coincides the radial direction of the reel mounting plate **24** and crosses the first, second and third display parts **21a**, **22a** and **23a**. As shown in FIG. 6, a symbol sheet **32**, whereon plural symbols **34**, **35** and **36** and the blank symbols **37** are disposed alternately, is attached to the sub reel **25**. The symbols **34**, **35** and **36** respectively represent the win, the loss and re-rotation of the first, second and third display plates **21**, **22** and **23**. Although dotted lines are used as the borderlines between the symbols **34** to **36** and the blank symbols **37** so as to distinguish them from each other, it is possible to omit the borderlines.

[0044] The sub reel **25** normally displays the blank symbol **37** when it is not rotating. If the blank symbols of the display plates **21**, **22** and **23** are arranged in line, the reel mounting plate **24** starts rotating and shifts the sub reel **25** to the position behind the blank symbols. Then, the sub reel **25** starts rotating and stops to display a symbol representing the win, the loss or the re-rotation of the display plates **21**, **22** and **23** through the blank symbols. Thus, the sub reel **25** functions as sub display means.

[0045] As shown in FIGS. 7 and 8, the display driver **26** is provided with first, second, third and fourth rotary shafts **40**, **41**, **42** and **43** and first, second, third, fourth and fifth drive motors **44**, **45**, **46**, **47** and **48**. The rotary shafts except the first rotary shaft **40** have tubular shapes. The first to third

displays **21**, **22** and **23** and the reel mounting plate **24** are firmly screwed to first, second, third and fourth flanges **49**, **50**, **51** and **52** that are fixed to the one ends of the first to fourth rotary shafts **40**, **41**, **42** and **43**, respectively. A portion of the first flange **49** is fitted into a concave part **50a** formed in the second flange **50**. A portion of the second flange **50** is fitted into a concave part **51a** formed in the third flange **51**.

[0046] The first rotary shaft **40** is inserted into the hollow part of the second rotary shaft **41** and determined its position by bearings (not shown) attached to both ends of the second rotary shaft **41**. Thereby, the first rotary shaft **40** and the second rotary shaft **41** are held concentrically, so are the first display plate **21** and the second display plate **22**. Similarly, the second rotary shaft **41** is inserted into the hollow part of the third rotary shaft **42** and determined its position by the bearings (not shown) attached to both ends of the third rotary shaft **42**. Thereby, the second rotary shaft **41** and the third rotary shaft **42** are held concentrically, so are the second display plate **22** and the third display plate **23**. The third rotary shaft **42** is inserted into the hollow part of the fourth rotary shaft **43** and determined its position by the bearings (not shown) attached to both ends of the fourth rotary shaft **43**. Thereby, the third rotary shaft **42** and the fourth rotary shaft **43** are held concentrically, so are the third display plate **23** and the reel mounting plate **24**.

[0047] Accordingly, the first-fourth rotary shafts **40**, **41**, **42**, and **43** are held concentrically, and the first-third displays **21**, **22** and **23** and the reel mounting plate **24** are held concentrically as well. The fourth rotary shaft **43** is fixed to the support plate **27** by bearing members **54** and **55**. Note that the reference numerical **54a** and **55a** represent bearings to enable smooth rotation of the fourth rotary shaft **43**. Gears **60**, **61**, **62** and **63** are respectively fixed to the other ends of the first to fourth rotary shafts **40**, **41**, **42** and **43**.

[0048] Each of the first to fourth drive motors **44**, **45**, **46**, and **47** is a stepping motor driven by drive pulses, and rotates the first-third displays **21**, **22** and **23** and the reel mounting plate **24**. Gears **65**, **66**, **67**, and **68** fixed to the drive shafts of corresponding drive motors are respectively in mesh with the gears **60**, **61**, **62** and **63** of the first to fourth rotary shafts **40**, **41**, **42**, and **43**. Drive force of the first to fourth drive motors **44**, **45**, **46** and **47** is transmitted to the first to fourth rotary shafts **40**, **41**, **42** and **43** so as to rotate the first to third displays **21**, **22** and **23** and the reel mounting plate **24** individually. Each of the first to fourth drive motors **44**, **45**, **46** and **47** is respectively held by brackets **70**, **71**, **72** and **73** and fixed to the rear side of the support plate **27**.

[0049] Each of the gears **60**, **61**, **62** and **63** is provided with position detecting segments **75**, **76**, **77** and **78** to indicate standard positions of the first to third displays **21**, **22** and **23** and the reel mounting plate **24**. Photo interrupters **80** mounted on each drive motors detects the position detecting segments **75**, **76**, **77** and **78** so as to detect that the first to fourth rotary shafts **40**, **41**, **42** and **43** rotate by 360 degrees.

[0050] Similarly, the photo interrupter **80** detects the position detecting segment **78** to detect that the sub reel **25** mounted on the reel mounting plate **24** makes one rotation. Note that the photo interrupters mounted to the drive motors **46** and **47** are not shown to avoid complication of the drawing. Note that, in the present embodiment, the blank symbols **31a**, **31c** and **31e** on the first to third display parts **21a**, **22a** and **23a** are respectively on a standard line **88** when