### 3.4 Invertible Counterpoint at the Twelfth

This interval of transposition results in the following inversions:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

Here the Sixths invert to Sevenths and must be treated as if they were dissonances. Similar motion is thus possible only between successive Thirds or Tenths.

To achieve a fully invertible counterpoint, avoid intervals greater than the Twelfth, and do not allow the voices to cross.

The Octave $\mathrm{f}+\mathrm{f}$ ' above the cantus firmus, which inverts to the diminished Fifth B+f, must either be treated as a dissonance, or have its inversion converted to a perfect Fifth $B b+f$.

Question-Why must upward leaps from 'A' to ' $F$ ', and all leaps involving ' $F$ ' and ' $C$ ', be avoided above the cantus firmus?

The usual custom of opening with a perfect consonance can be observed by beginning with a Fifth (or a Twelfth) above the cantus firmus; this will invert to an Octave (or a Unison) below. Cadences, however, are exceptional. They must take second- or thirdspecies form, terminating on an Octave above and a Fifth below. For that reason, cantus firmi in 'F' are best avoided for this type of exercise.

Note that the large interval of transposition can preclude the use of adjacent voices.

## Sample Workings



