Chapter 8   Capturing Stones

7000   Why is Capturing Desirable?

If you succeed in capturing your opponent's stones by suffocation, that achievement gives you the following advantages:

1.   Captured stones are removed from the board and will be added to your score.

2.   After you remove the captured stones, the intersections which became vacant after the removal of captured stones will become your territory.

3.   Captured stones leaving the board cannot play any role on the board.

   Beginners consider the first and second factor meaningful and evident but as you are getting more skillful, you will consider the third factor to be the most important.
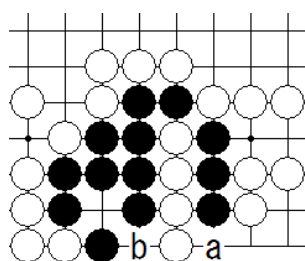
 Fig. 1

Look at Fig.1 and find the black's best move there.

A move at "b" is poor since your stones will then be captured instantly.   Similarly, white's move at "b" is also poor for the same reason.   In Fig. 1, black's best move is to play "a", then black can capture four white stones.   If it is the white's turn, "a" will be the best move for him.

When the black plays "a", he will capture four white stones.   Then, you get 4 points as the number of captured stones and you get additional 4 points as your new territory. Well, these are advantages, but moreover, it is important for the black to be able to remove the four white stones from the board so that they do not function to play a role in the capturing race any more.   In fact, if the black fails to capture the four white stones, the whole black stones will be dead.

7010   Fleeing is Faster than Chasing

Let us assume that there is one stone of your opponent on the board and you are trying to capture it.   Basically, it is almost impossible to capture the stone.   Why? Because you need many stones to capture it and your opponent only has to avoid capture with very few stones added.   In Fig. 2 this basic fact that fleeing is faster than chasing will be confirmed.
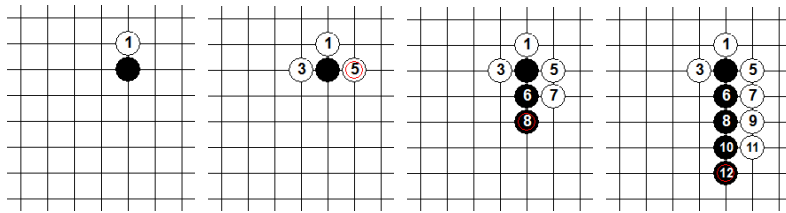
Fig. 2

The white's move (1) is the start of moves to try to capture one black stone.

If black is not happy to touch it, he may pass moves (2) and (4) while white makes moves (3) and (5). At this point, black needs the move (6) to avoid capture. But if the white tries to continue chasing the escaping black with the move (7) (9) (11) and so on, black finds it easy to respond with moves (8) (10) (12) and so on. If you observe moves from (7) to (12), you will recognize that black gets more breathing points than the breathing points white has filled. For example, at white's (5) there was only one more breathing point to fill, but at white's (7) there are two more breathing points. At white's (9) there are three more breathing points and at white's (11) there are four more breathing points. Thus you will recognize that the speed of chasing is much slower than the speed of fleeing.

7020 Stones Near the Edge

As mentioned in the last section, fleeing is basically faster than chasing. But there are exceptions. Let us look at Fig. 1.
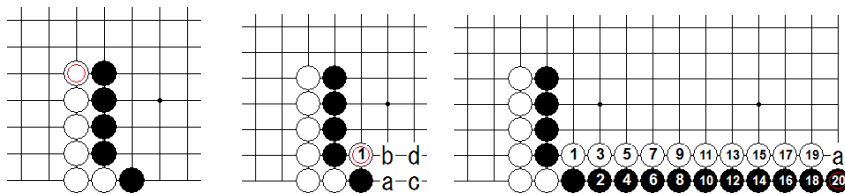

Fig. 1   Fig. 2   Fig. 3

The white has formed a wall trying to make the left side his territory while the black has a wall trying to make the right side his territory as well. However, if white plays (1) of Fig. 2, a single black stone on the first line of the edge cannot avoid capture. Then the white can capture a black stone anytime. The black can make a move at "a" to avoid instant capture, but the white can chase at "b". If black continues to make a move at "c" the white can respond at "d" and so on. What is going to be the result of these moves? Fig. 3 shows that the stones on the first line of the edge cannot escape as the escaping moves will end at the corner at move (20). The white can play "a" anytime.
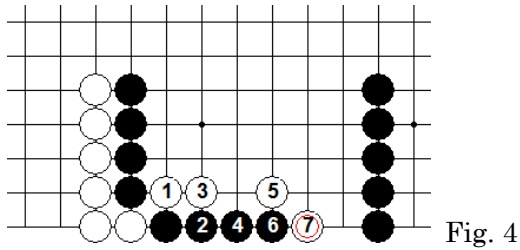
Fig. 4

Fig. 4 shows you that in a similar situation of escaping along the first line at the edge, escaping is not possible even when there are black stones waiting on the right. In this sequence of moves, (3) (5) and (7) are clever moves.

The reason the black failed to flee away in Fig. 1 to Fig. 4 is simple. If the board has endless space without a border, you can flee freely. But actually there are borders at the edges of the board. For that reason, if you try to flee along the edges, fleeing is not that easy.

7030   A Stone on the Second Line from the Edge.

You should note that a stone on the second line from the edge will be found difficult to flee if the opponent succeeds in chasing the stone towards the very edge.
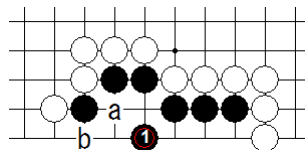
Fig. 5   Fig. 6

Fig. 5 is a very common example of it. For the black, connection at "a" is an important move. If he fails to do so, the white will be happy to make his move at "a". Then the single black stone on the second line is captured. If the white should play at "b" first, then the black would be able to respond at "a" and nothing further would happen. But for the white, it is evident that "a" is a better move.

There is only one exceptional case to this pattern which will be shown in Fig. 6. The black's move at (1) is clever. If the white plays at "a" trying to capture the black stone on the second line, the black can play "b" and then, the white cannot capture these two stones any more.

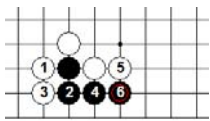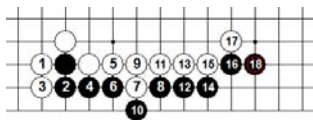## 7040　A Stone at the Third Line.

 Fig. 7　　 Fig. 8

A stone located at the third line of the edge is basically able to flee as shown in Fig. 7 in which the fleeing black stones are not too free since it is so close to the edge but maybe it is possible to flee safely.　Fig. 8 shows you an example of the following sequence of moves.　It is a matter of question whether it is wise or not to try to flee that way.
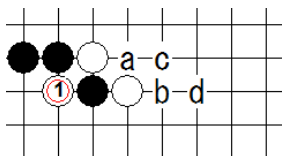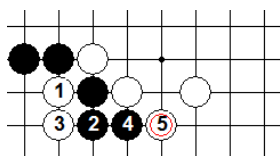
　　　　

Fig. 9　　　　　　　　　Fig. 10

Fig. 9 shows you a case in which a stone on the third line from the edge is sure to be captured.　If an additional white stone is located at "a", "b", "c" or "d", then, by the move of (1), the black stone is unescapable.　Fig. 10 demonstrates what will happen if there is a stone at "d" of Fig. 9.

7050　A ladder

In Section 7010, it was mentioned that basically fleeing is faster than chasing. However, there is a pattern in which the speed of chasing can be as fast as the speed of fleeing
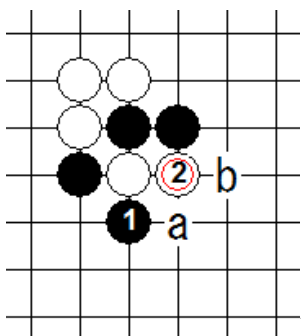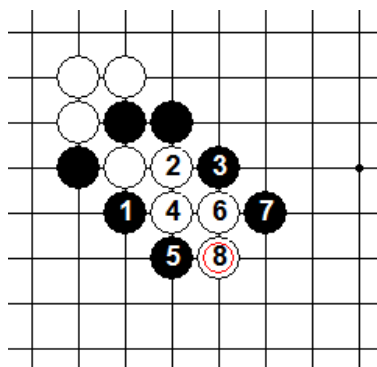
 Fig. 11　　　　 Fig.12

Please look at the pattern shown in Fig. 11.　The black's move (1) is an attempt to capture a single white stone if the white is not fleeing.　However, the white can make a move at (2) trying to run away.　If black plays "a" next, then white will play "b" and that is a typical pattern which we referred to in Section 7010.　However, it this case, it is wiser for the black to try to chase from "b" instead of "a". What will happen

then?

Fig. 12 shows you the sequence of possible moves.　As the white tries to escape by a move at (4), the black should play (5) be in the way of the direction of the escaping move.　If the white continues escaping moves by playing (6) and then (8), the black can also continue chasing by moves (7) and then (9).　What is going to be the final result?

The answer is simple.　If the board has no border like our universe, white can fee for ever and the black can chase for ever as well.　It will be an endless chasing race. However, if the board is in the shape of a square and has border lines, the result will be a capture which means it is useless to try to flee.
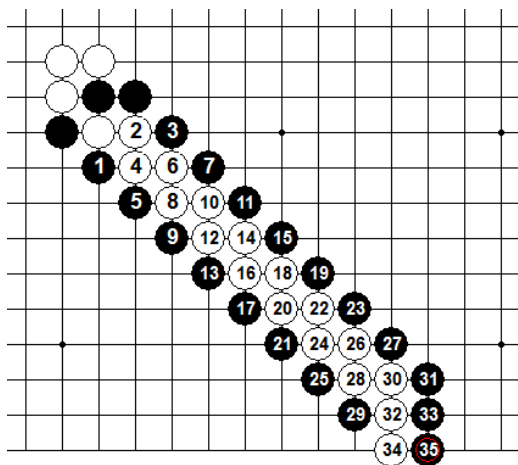

Fig. 13

Fig. 13 shows you the result as the chasing race comes to a border of the board.　The white tries to flee moving like a zigzag shape and the black tries to chase tapping the head of the fleeing moves at every move.　As the white reaches the second line from the edge at (32), the black may be able to continue a move at (34) but, at this point chasing from the side of (33) is valid and if white makes another move at (34), the black can play (35) and now it becomes evident that white cannot escape.

This chasing and fleeing pattern is named a "ladder".　In actual games, when the black's move at (1) is made, you can assume that the white stone cannot flee.

At this point, you will be able to confirm that the ladder pattern is forming a thick diagonal line of four stones width as you observe in Fig. 13.　And it is a good idea for you to remember that the four lines of the ladder itself and another two lines in both sides of the ladder is important to watch.　This is important because the fleeing player can actually succeed in fleeing if there is an existing stone of his at any point along those six lines.
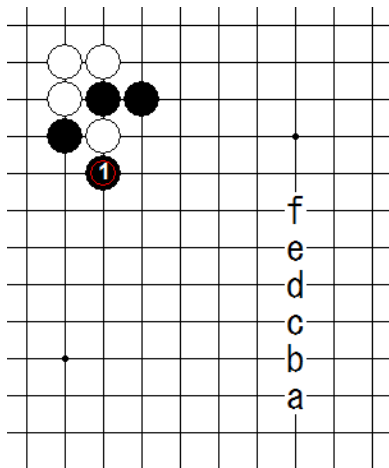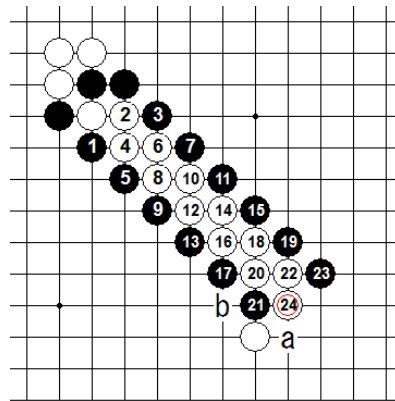
Fig. 14

Fig. 15

In fact Fig. 14 indicates each of the six lines from "a" to "f" and if there is an existing white stone at one of such points, then, the white can flee.   In this pattern "a" may look pretty remote from the ladder, but the result demonsitrated in Fig. 15 is proving that a white stone at "a" is valid..   As white"s move at (24), blacks move at "a" is the normal ladder chasing move, but in this case, white will find it possible to capture the white stone at (21) by the next move at "b".

By Fig. 14, you have learned that the black cannot capture the white if there is an existing stone at "a", "b" ,……."f".

However, there are cases in which a ladder chasing occurs without any stones along the six lines, the fleeing player can choose to make a good move along some location along the six lines.   In such a case, the chasing player must think and decide if he should make a following move to capture the stone at the ladder or give up ladder chasing and respond to the opponent's move along the six lines.

In actual games, you may often meet a situation in which you see that there are stones of both players towards the direction of ladder chasing.   Such patters are pretty complicated to judge if chasing is good or fleeing is good.   Strong players always try to check the result of a ladder chasing race.   If you actually place stones on the board to check, anybody can confirm the result if he tries.   But in actual games you are not permitted to try placing stones on the board.   Thus you must image the result of such moves in your mind!

At this point, we will demonstrate a case in which a decision to capture stones at the ladder is wise.
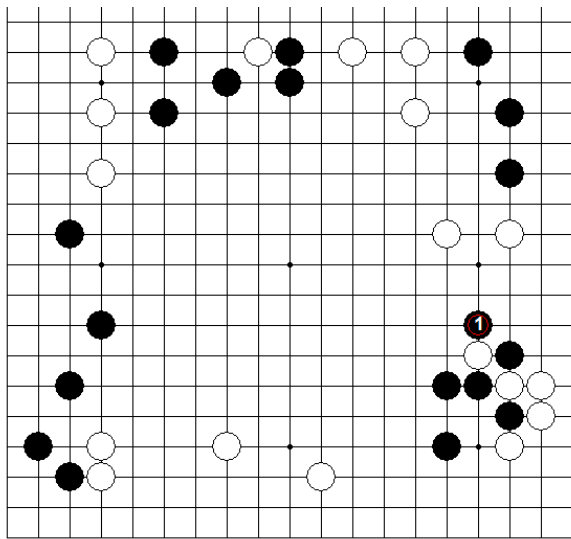
Fig.16

Please look at Fig. 16. In this pattern, the black can capture a stone by (1) as it is a
typical ladder pattern since there is no white stone to the direction the ladder is
going.

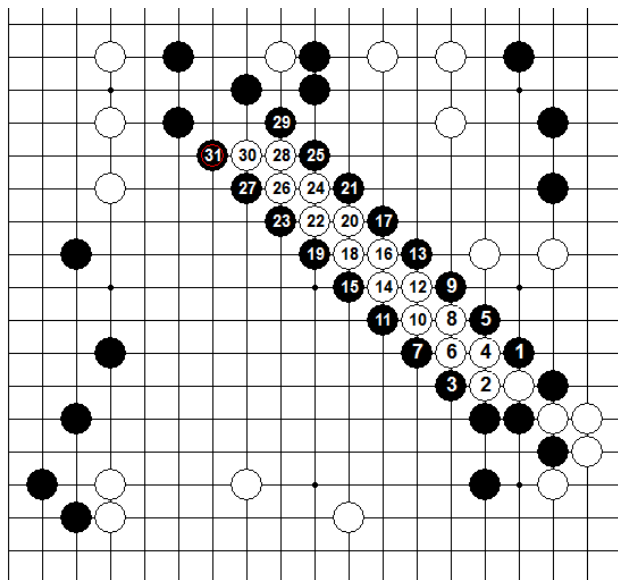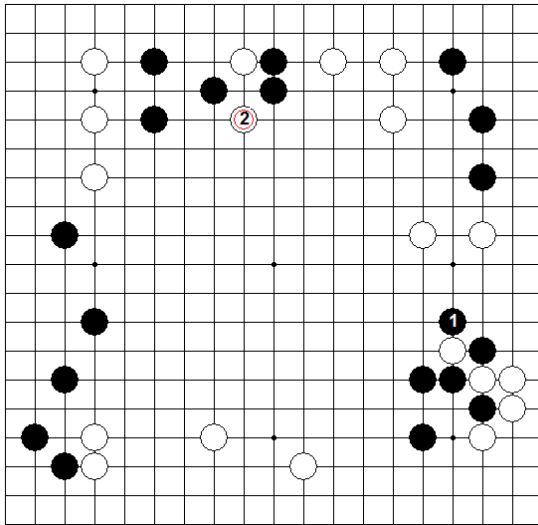The success of the capture is confirmed in Fig. 17.

Fig. 17

Fig. 18

However, if this were an actual game, the white's move at (2) in Fig. 18 would give the
black a headache.   In this pattern the black must decide to capture a white stone of
the ladder or to respond to the white's move of (2) at the upper side of the board.
We will show you the result of both cases to compare them.

Fig.19

It is possible for the black to capture a stone of the ladder by (3) of Fig. 19, but then the
white will be happy to play (4) which will succeed in cutting the black stones into two
separete group at the upper side.

Fig. 20

If the (4) of Fig. 19 is considered too big a damage for the black, then the black must respond to (2) by connecting move of (3) in Fig. 20, then the white can flee from the ladder as shown in Fig. 20.   With the existence of the white stone at (2), the black will find that the white can escape from this latter at the move (30) of as demonsitrated by Fig. 20.

The last note in relation to the six lines of the ladder is the fact that there are seven exceptions to the valid existing stone along the six lines of the ladder.

Fig. 21

Fig. 21 is showing you such exceptions.   In this pattern, "a" to "f" are the valid lines but seven points indicated from "g" to "m" are the exceptions.

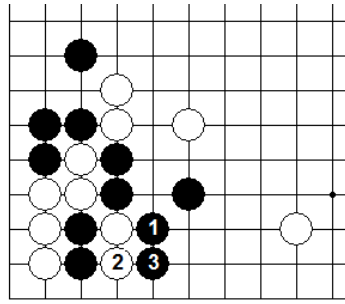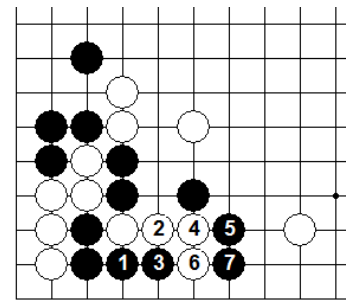## 7055　A Loose ladder

Fig. 22　　　　　　　　　　Fig 23　　　　　　　　　　Fig. 24

At this point, you can learn that an application of a "ladder" pattern is often possible.
If you, as a black player, meet a pattern like this one shown in Fig. 22, you may give up
the two black stones at the lower left corner and choose moves indicated in Fig. 23.
　This
result shows that the corner white can now survive and the black stones need moves to
escape from the corner towards the center of the board.
But there is a much better moves for the black as shown in Fig. 24.　In Fig.24, the move
(1) is not a ladder move chasing since the white can maintains three breathing points by
(2).　The black's (3) is an important move and the white must respond at (4) keeping
three breathing points.　But the black refuses white's attempt to increase his breathing
points by (5) and then (7).　At (7), you will see that the white cannot escape from the
black's fishing net!　Confirm that the black not only captured five white stones but
this result shows that the white stones at the corner are dead also.　This pattern is
named "a loose ladder".

7060　Wooden Sandal Trap Capture
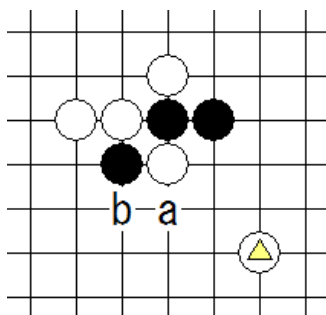
Please check Fig. 1 below.
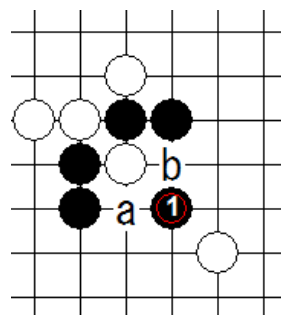
Fig. 1　　　　　　　　　　　　Fig.2

In this pattern, if there is no existing stone towards the direction of the white stone
　marked "△", we have learned that the black can capture a white stone by the move

at "a" as the ladder pattern is available.   We have also learned that if there is a stone marked "△", the black cannot capture a white stone by ladder move.   However, if there were another black stone at "b", there is a way to capture a white stone.

Look at Fig.2 in which there is an additional black stone at "b" of Fig. 1.   In this case, the black's move at "a" or "b" in Fig. 2 to form a ladder is not wise.   The black's best move is (1) of Fig. 2.

2.   By this clever move, the single white stone has no way to escape from the trap! This technique to capture a stone is named "Japanese Wooden Sandal Trap" move.

Fig. 3 shows you a little more complicated pattern of another Japanese Wooden Sandal Capture move.   In this case the black's wise move is to place a stone at "a".   By that move, the two white stones cannot escape from this trap!.
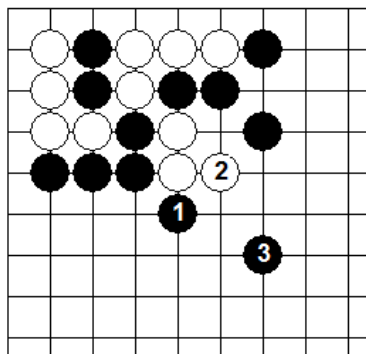

Fig. 4

Fig. 4 shows you a further complicated pattern but it is an application of Japanese Wooden Sandal Trap.   The black can play (1) and then (3) and the three white stones cannot escape from this trap.

7070   Catch a Sea Bream with a Prawn as a Bait! (Snapback)

The title of this section is a Japanese saying which means a prawn is valuable but it is wise to get a sea bream which is more valuable than a prawn which may be utilized as a bait.   This saying applies to a pattern in which a player intentionally let the opponent capture one stone of his but inmake it possible to capture no less than two stones immediately.   Fig. 1 shows a typical pattern as such.
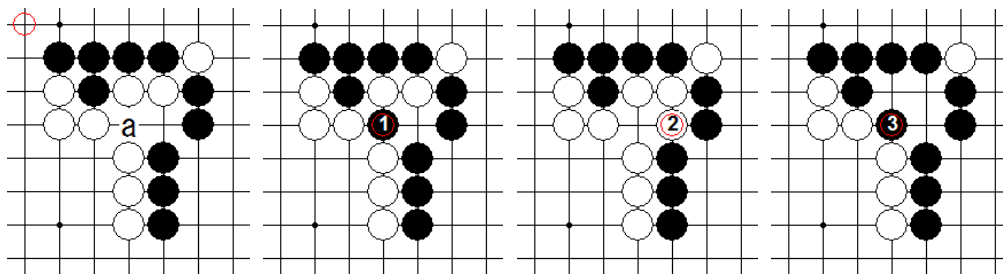
Fig. 1 Fig.2 Fig. 3 Fig. 4

Looking at Fig. 1, you may think white's connection at "a" is quite certain since white
can capture a black stone immediately if one is placed at "a". Beginners often
overlook the outome of this situation. In this case, the black can play "a" in an
atempt to capture two white stones. Since the moves are pretty confusing, we will
show you one chart for each move. Fig. 2 shows you the timing the black gave a bait
of a prawn represented by one black stone. Fig. 3 shows you the timing at which the
white ate the bait. Now the black can play (3) of Fig. 4 capturing a big sea bream
represented by three white stones. At this point you may question if the black's
move of (3) is a violation of the Ko rule. But it is not, because the move (3) is unlike
recapturing of a stone at Ko in that the move is not repeating a board pattern at all.
Looking at moves (1)(2) and (3), you will be able to confirm that the first move at (1) is
imporntant since it is impossible to capture the white stones without using a bait at
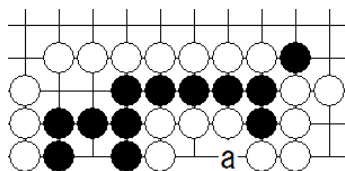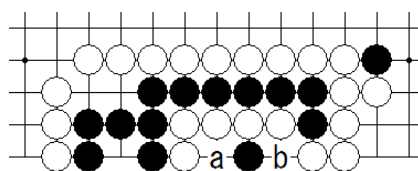(1).

Fig. 5a Fig. 5b

Fig. 5a shows you a similar pattern at the edge of the board. If the white can play "a"
white is connected to the right hand group and the black's group of 11 stones will be
dead. However, if the black can play "a", the white can capture that stone
immediately but as soon as the white captures the black stone, the black can
recapture the 5 stones! Then, black succeeded not only in capturing a few stones but
to make the whole group to be completely living. In this case the black's move at "a"
is a bait of a prawn to catch a white sea bream.

Now check what will happen in case of Fig. 5b. This may be a pattern which looks like
the black's death. But if it is the black's turn, there is a way to survive. The black can
play "b" to increase the stones to be captured. The white will naturally capture two
black stones by "a". Now you will see that the result resembles Fig. 5a. The black
places a stone at "b" again. The white is free to capture it. But then the black can
recapture 7 stones and survive! Fig. 5b is more complicated than Fig. 5a but you

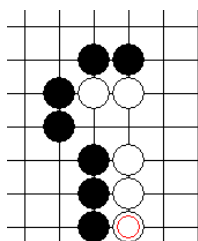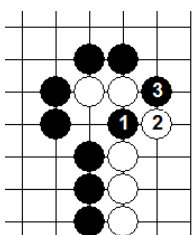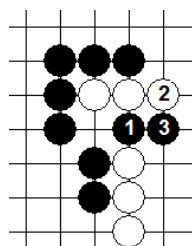will find this solution, if you get used to such patterns.

Fig. 6

Fig. 7

Fig. 8

Fig. 6 is a pattern in which a similar technique is applicable.　If you get used to the pattern of Fig. 1 above, you may be able to find a clever move (1) shown in Fig. 7.　If the white plays (2), the black's move (3) will bring up a similar result to the pattern of Fig. 1.　And if the white chooses (2) of Fig. 8, the black can chase the three white stones by (3) of Fig. 8, which will eventually capture three white stones.

7080　Grab the Tail!

We will discuss another interesting patterns in which some stones are captured.

First of all please refer to Fig. 1

Fig. 1

The left hand black and the right hand black are pretty remote and the connection of them seems to be quite difficult.　But by the black's move of (1), the right and left are securely connected.　In general, connection of stones near the edge of the board is easier than at the center of the board.　Please restudy Section 2110 and 2120.　Now let us check what will happen in Fig. 2.
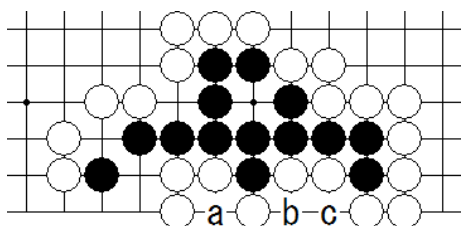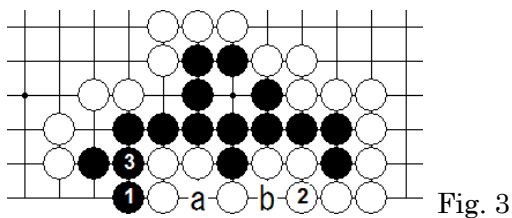

Fig.2

In this pattern, a few white stones at the lower edge appear to be well connected since the black cannot play "a", "b" or "c".　If they are all connected to the right hand wall, the black cannot form two eyes which means a complete death of the black!　However, in this pattern, the black has a way to grab the tail of the white and survive.

Fig. 3 shows the black's correct moves to capture three white stones.

Fig. 3

The black's (1) is good.   The white can connect at (2) but as the black plays (3), you will
realize that the white cannot connect at "a".   If he does, the black can play at "b" to
capture 5 stones!   This is a typical example of a pattern in which you can capture a
few stones as if you are grabbing the tail of the escaping animal!

At this point, the readers should note that there are many cases in which it is important
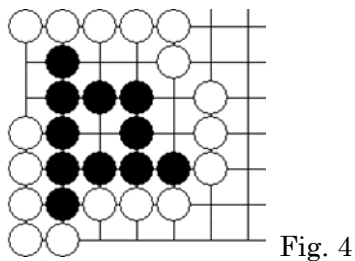to sacirifice a stone before trying to grab the tail.

Fig. 4

Fig. 4 is a very good example.

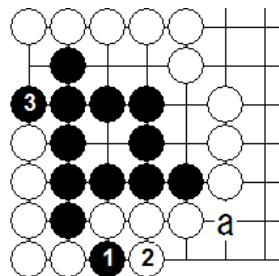

Fig.5   Fig. 6

If you simply try to grab the tail as in Fig. 5 with a move (1), the white can respond at (2)
and the white stones are all connected.   If you are familiar with the technique to
sacrifice a stone effectively, you will be able to play (1) of Fig. 6 first.   The white
needs to capture that stone instantly by the move (2), then, the black can make a
move at (3).   Now the white cannot connect at the location where (1) was sitting,
since the black can capture 10 stones by a move at "a" if the white should connect at
where (1) was sitting.

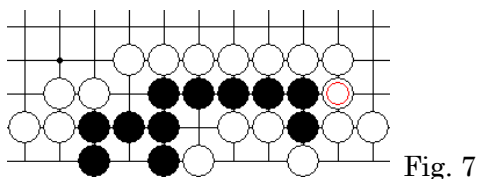Here we will show you another example of a similar situation.

Fig. 7

In Fig. 7, how would you play if you are the black player?
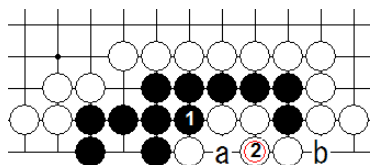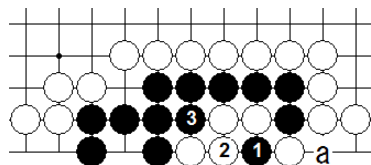
Fig. 8

Fig. 9

If you try to grab the tail with the move (1) of Fig. 8, the white will be happy to connect

at (2).   With this result, the black can capture one stone at the edge by playing at "a",

but that is only to form a false eye.   The white will connect stones at the edge plaing

"b".   With one eye and one false eye, the black group cannot survive.   If you are wise

enough to play (1) shown in Fig. 9 as a sacrifice stone, the result is totally different.

The white will capture a stone by (2) but if the black plays (3), you will find that the

white cannot connect at where (1) was sitting.   If the white should try to connect at

where (1) was sitting, then the black will be happy to capture 6 stones all together!

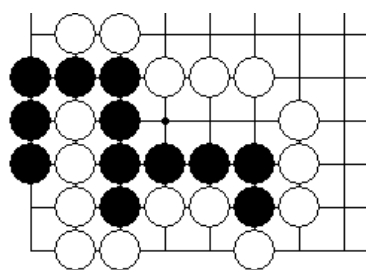Before closing this section, we will show you an exercise.

Fig. 10

If you are the black player, how would you try to capture a few white stones?   Many

beginners who have learned a sacrificing moves for " Grabbing the Tail" will often try

to sacrifice a stone before grabbing the tail by a move like (1) in Fig. 11.   But that is a

terriblly bad move.   The result after that will be as shown in Fig 12.   The black can

try to grab the tail but when he plays (3) and (5) you will find that the white can

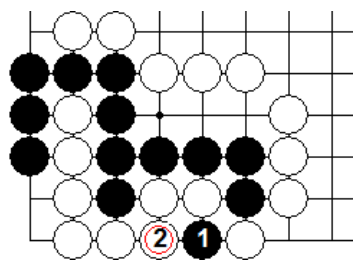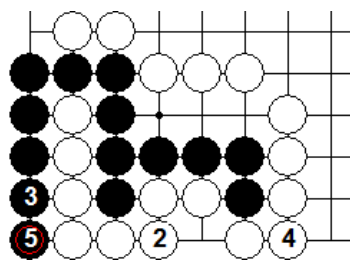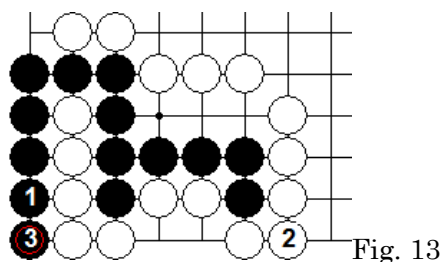connect all stones at the edge by (6).   The result is the black's death.
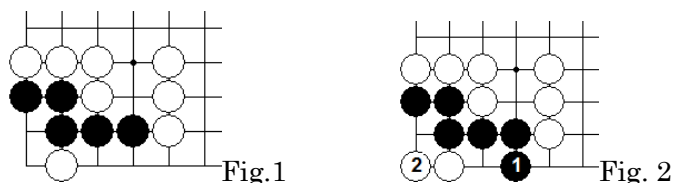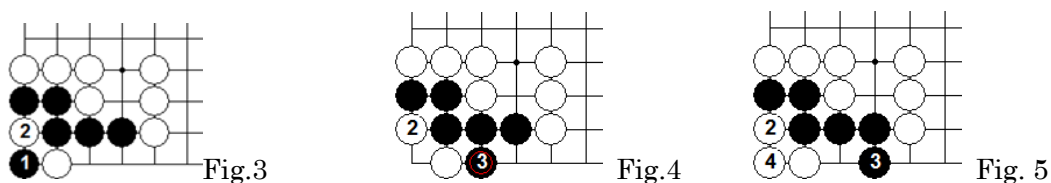
Fig.11

Fig.12

Fig. 13

In the pattern of Fig. 10, the sacrificing move is a bad move.   If the black simply play at
(1) and then at (3) shown in Fig. 13, the white has no way to avoid capture.   The
black has succeeded in grabbing 5 stones as the tail and survive!

7090   Pressed Survival

Pressed Survival may not occur so often but you had better know the essense of it.

Fig.1

Fig. 2

If it is the black's turn in Fig. 1, how should he play from here?   The size of the black's
space at the corner is very narrow.   If the black tries to widen the space by (1) of Fig.
2, white will play (2).   The result is a pattern of death.

Fig.3

Fig.4

Fig. 5

However, there is a clever technique to bring the black into a survival pattern.   Look at
the move of (1) in Fig. 3.   To the black's (1), the white will make a move of (2) to
capture the stone at (1) in Fig. 3.   But if the black plays (3) of Fig. 4, you will find out
that the white cannot connect the two stones inside the black's space, because that
move is a violation of the rule which prohibits self-suffocation.   This means that the
black can capture two stones at the same time, when necessary, which brings about a
typical survival pattern with two separate eyes.   It is tricky, isn't it?   At this point,
you should remember that the move of (3) in Fig. 5 is a poor move.   Actually, the size
of the space available by (3) in Fig. 4 is smaller than the space available by (3) in Fig.
5.   But if you play (3) of Fig. 5, the white is able to connect at (4) and that result will
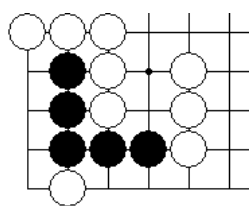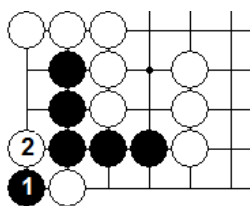be a typical death pattern of the black!
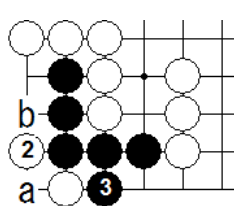
Fig. 6

Fig. 7

Fig. 8

To understand Pressed Survival even better, let us study the pattern of Fig. 6.

The pattern of Fig. 6 resembles the pattern shown in Fig.1 but it is quite different.

The black can copy the moves of Fig. 3 by (1) in Fig. 7 and white will respond at (2).

However, in this case, when the white plays (2) to capture one stone and the black plays (3), look at the result shown in Fig. 8.   In this case, the white is permitted to make a move at "a" because that move is not self-suffocation like a connection at Fig. 4!   The result is the black's death.   The great difference is whether there was an existing stone at "b".

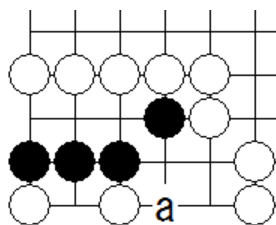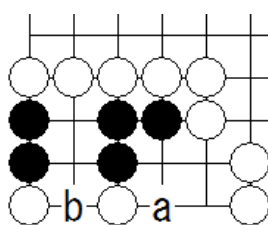Here is another example to confirm the essense of Pressed Survival.

Fig. 9

Fig. 10

In case of Fig. 9, the black's move at "a" is valid as a move to make the black stones into a survival pattern utilizing the principle of Pressed Survival.   To the move of "a" , the white is not allowed to connect two stones to make it into a group of three stones.   In case of Fig. 10 which resembles Fig. 9, note that if the black plays "a", white is allowed to connect at "b" to form a group of three stones.   The result is the black's death.

Finally, you will see a problem which you will be able to solve if you are familiar with the techniaue of Pressed Survival.
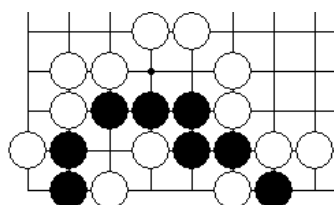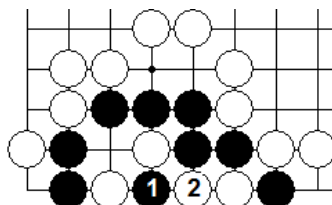

Fig. 11

Fig. 12

If you meet a pattern shown in Fig. 11, you may consider that the black group is now dead.   The black may be able to try to capture two white stones, but if you try it, the white will make a group of three stones instead of two stones.   When the black captures three stones, the white will be able to kill the black stones.   However, there is a clever solution.   The clever move of the black is (1) in Fig. 12.   The white will
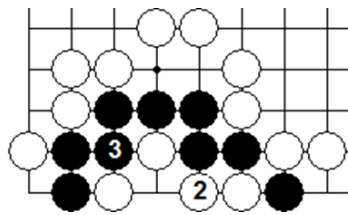
instantly capture it by (2) in Fig. 12.
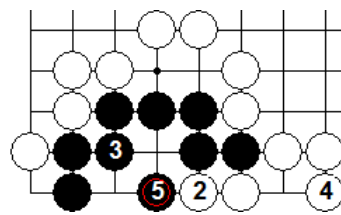
Fig. 13

Fig.14

Then the black should not capture two stones at the edge. If he does, the white will
recapture one black stone and the result is the black's death pattern. But the black
has a clever move at (3) in Fig. 13. To this move, the white cannot connect two stones
because that is not allowed by rule as it is self-sufforcation. Therefore, the white will
choose to remove the right hand stone at the edge. The black is able to capture two
stones on the left and the result shown in Fig. 14 is the black's survival.

7100　Recapturing after Being Captured

The pattern shown in Fig. 1 here may be even rarer than Pressed Survial.
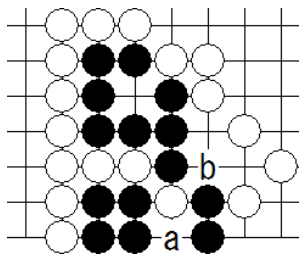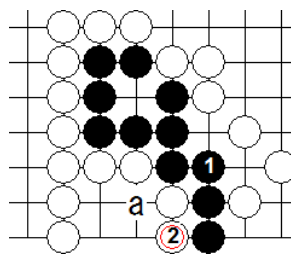
Fig. 1

In Fig. 1, four black stones are in the risk of capturing by the white's next move at "a".
However, if the black play's "a" to capture a white stone, the next move of the white at
"b" will succeed in interfering the black's second eye to be formed. The eye looking
vacant point has become a false eye which means the death of the black. Thus you
may judge that the black is unable to survive from the pattern of Fig. 1. But that
judgement is not correct.

In fact, the black has a clever move to play at "b" first, which permits white's move at
"a" to capture four black stones. Now look at the pattern reached shown in Fig. 2.
After the black's (1) and the white's (2), the four black stones were removed as
captured stones. But you will see that the black is now able to make a move at "a" to
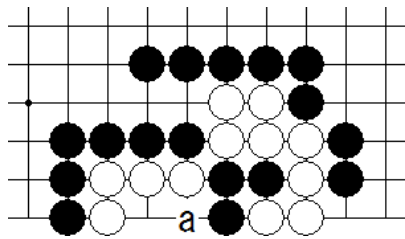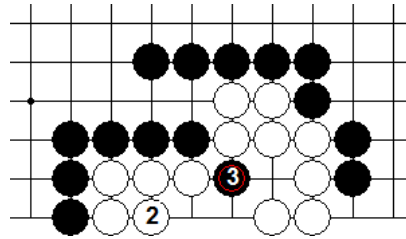recapture two white stones. The result is the black's survival.

Fig. 3

Fig. 4

Here is another example. The black cannot avoid white's capture of the three black stones at the edge by playing at "a", and thus you may judge that the white is living. But that interpretation is not correct. The black has a clever move at "a" in Fig. 3 to deliberately increase the number of stones captured from three to four which may look suicidal. The white is happy to capture four black stones by playing (2) in Fig. 4. But now you will find that the next move of the black (3) will be able to recapture five white stones! The result is the white's death.

There can be more complicated patterns of "Recapturing after Being Captured" that may occur, but at this point it would be sufficient to summarize that the above two patterns simplified in Fig. 5 and Fig. 6 are the basic forms of stones of such cases.
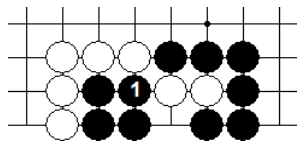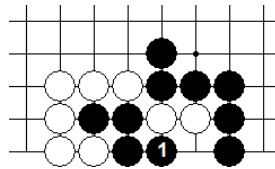

Fig. 5

Fig. 6

We may call Fig. 5 as "the Square Pattern" and Fig. 6 as "the Zigzag Pattern".

7110   Stones Intentionally Sacrificed

Lastly in this chapter, we will demonstrate to you some other cases where a big group of stones is intentionally sacrificed.
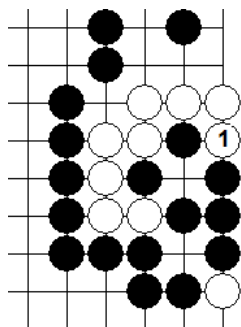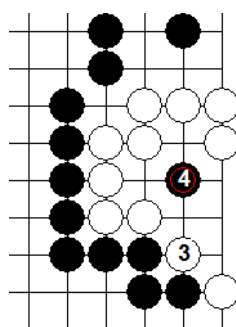

Fig. 1

Fig. 2

Fig. 1 is the first example. Now the white has played at (1) trying to capture two black stones. You will recognize that if the black chooses to connect the two stones the white will capture 7 black stones! With that understanding, the black may choose to capture a single stone near the lower right corner with an intention to

connect two black stones if he has chance.   But the white will then instantly capture two black stones which will bring about the minimum survival pattern for the white. Would that be the best result for both?   Actually it is not.   The black's clever move is to connect two stones allowing the white to capture seven stones.   As soon as the white has captured seven stones, the black can play (4) in Fig. 2.   By this black's move, the white is unable to form two separate eyes of this big group of white stones. It means the black killed all white stones!
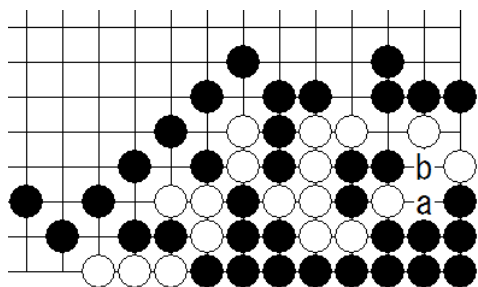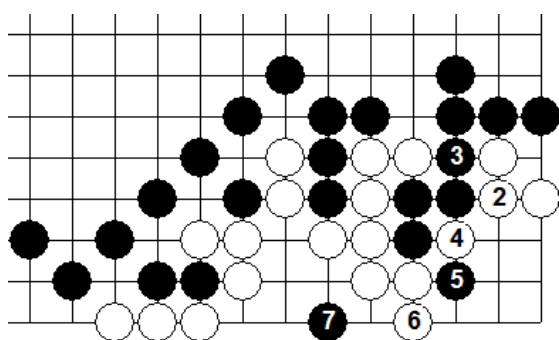
Here is another astonishing example.

Fig. 3

Fig. 3 is a portion of a problem introduced by Intetsu Akaboshi in Edo Era.

If you are the black player, recognizing that no matter what the black can do, the white will be able to capture the big group of stones at the lower right corner.   As you count them, you will find that by white's move at "a" will capture 15 stones.   If the black plays "a" first, the white can play "b".   It is a typical pattern of "Catching a Sea Bream with a Prawn as a Bait" discussed in 7070.   However, surprisingly, the black's move   at "a" in Fig. 3 is a clever move in this case.   The white will be happy to play (2) at

"b" of Fig. 3 to capture 16 stones.

Most commonly, if you capture 16 stones the space is large enough to form two eyes, but not in this case!   The black connects at (3) in Fig. 4 and the white will play (4) to capture and remove 16 suffocated stones.   But the black now can play (5).   It is a variation of Capturing after Being Captured.   If white tries to make two eyes by a move of (7), the last move of the black at (7) will kill all white stones!

During your life with many games, you are not expected to meet a rare pattern like

this example.　　Therefore, it is not important to try to remember Fig. 3.　　But it is quite certain that it is worth remembering that such an astonishing clever move may be there on the board.　　The author wishes that the reader will continue to enjoy the fascinating game of Go in the future.