Scaling means ‘scraping away.’ You can scale old food, tartar, or even a fish bone caught under the gum. You usually scale teeth to remove tartar.

Clean teeth keep our gums healthy. Scaling a person’s teeth gives infected gums a chance to become normal again.

However, gums remain healthy only when we keep the teeth beside them clean. If we are not careful about cleaning our teeth after they are scaled, tartar will soon return. Instead of being healthy, the gums will become sore and infected again.

You must remove something caught under the gums (page 133) before it causes more pain and swelling. Remove a piece of fish bone or piece of mango string now.

If the person has a mild gum problem (gums that bleed), wait a week or so before scaling. If the person uses this time to clean his teeth better and to rinse with warm salt water (page 7), the gums will improve. The person’s teeth will be easier for you to scale, and he will learn that he can do much by himself to care for the gums.

Use a mirror to show the person gum infection inside his own mouth. Later he can see the improvement he has made. He can learn about how to keep gums healthy as he follows his own progress.

Scale a person’s teeth only when he really wants to try to keep them clean. If he does not want to clean his teeth, the tartar will soon return. Do not waste your time scaling the teeth of a person who does not want to learn.
THE INSTRUMENTS YOU NEED FOR SCALING

We scale teeth with special instruments called scalers. There are many different kinds of scalers for different teeth, to make scaling easier. It can be a problem to know which ones to buy.

Scalers are expensive instruments. For that reason, it is better to order only a few instruments that you can use to clean most teeth.

You need only 2 double-ended scalers, or 4 single-ended scalers.

For instance:

1. **One with two pointed tips**—to remove tartar from the part of the tooth **near** the gum.

   ![Scaler with two pointed tips]

   Its proper name is *Ivory C-1 scaler*.

2. **Another with two blunt, rounded ends**—to remove tartar from the part of the tooth **under** the gum.

   ![Scaler with two blunt ends]

   Its proper name is *G-11 and 12 curette*.

The ends of the scaler are the important parts. One end is bent to the left and the other end is bent to the right, so you can reach more easily around all sides of the tooth.

The blade at each end of the scaler is sharp. You must keep the blade sharp. A sharp blade can break more of the tartar away than a blunt blade.

You also need these:

- **Mirror Probe (explorer)**
- **Tweezers (cotton pliers)**
- **Sharpening stone (Arkansas stone)**
- **Probe (explorer)**

*Note:* When you order an instrument, use both its common and proper name. Then you have a better chance of receiving the instrument you want. You can also make some of your own instruments. See pages 214-216.
HOW TO SCALE TEETH

Tartar starts to form inside the gum pocket. There it builds up, because the gums protect it. So you often must feel rather than see the tartar when you scale a tooth.

You must remove all of the tartar so the gums can heal. New tartar grows faster when there is old tartar left behind for it to build upon.

Lay out what you need ahead of time:

- ✔ your instruments: scalers, mirror, probe, tweezers
- ✔ sharpening stone
- ✔ cotton gauze

Your light must be good enough to see the tooth and gums around it clearly. Scaling teeth requires time and practice. Make yourself and the person comfortable. You can sit next to a special chair that lets the person lean back (see page 75).

The steps in scaling teeth are these (pages 129–133):

1. Explain to the person what you are going to do.
2. Feel under the gum for rough spots (tartar).
3. Place the scaler under the tartar.
4. Pull the scaler against the side of the tooth.
5. Check to be sure the tooth is smooth.
6. Explain what you have done and what the person should now do.

1. **Explain what you are going to do.** Tell the person what to expect. There will be some bleeding and possibly some pain. However, you can stop and rest, or inject local anesthetic, if it is painful. Remember: first wash your hands and your instruments! (See pages 86–89.)

2. **Feel under the gum for tartar.** Tartar feels like a rough spot on the root of the tooth. Since tartar can form anywhere inside the gum pocket, feel for it on all sides of the tooth.

You can check for tartar two ways:

   a. **Use your probe.** Slide the point up and down along the root surface under the gum. Feel for places that are rough. Teeth without tartar are smooth.

   b. **Use cotton gauze.** Twist a corner and press it between the teeth. The gauze lowers the gum and soaks up the spit. You can then see more tartar.
3. **Place the scaler under the tartar.** You must learn two important things: how to hold the scaler and how to slide the scaler into the gum pocket.

Hold the scaler almost as you would hold a pen. You can then pull it against the tartar with both power and control.

**Control is very important.** The ends of the scalers are sharp. If you are not careful, the blades can cut the gums. Be gentle and do not hurry. Always hold the tip of the scaler on the tooth to avoid poking the gums.

Rest your 3rd finger against a tooth. This will steady your hand and let you slide the sharp scaler under the gum with care.
The edge of the gum, near the tooth, folds under to form a pocket. This **gum pocket** goes completely around each tooth. The gum pocket can be shallow or deep. A deep pocket means there has been an infection for a while.

Tartar starts forming deep inside the gum pocket. If you remove tartar that you can see above the gum, it is helpful, but not good enough. You must remove the rest of the tartar, or the infection will continue. If part of the tartar stays on the tooth, the infection will continue.

**First**, use the pointed-tip scaler to remove the tartar that you can see. **Then**, go back with your rounded-tip scaler and scrape away the remaining tartar.

Be careful when you place the rounded end of the scaler inside the gum pocket.

**a)** Put the sharp face of the blade against the tooth. Slide it along the tooth down into the gum pocket. **b)** You can feel the edge as it goes over the rough tartar. Stop when you feel the bottom of the gum pocket.
4. **Hold the end tight against the side of the tooth and pull the scaler.** Try to break free as much tartar as possible at once. It is a bad idea to remove the tartar a bit at a time, because the remaining tartar becomes smooth and harder to scrape away.

<table>
<thead>
<tr>
<th>1. Tighten your fingers on the scaler.</th>
<th>2. Pull the scaler with a firm short stroke.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALWAYS KEEP THE TIP OF THE SCALER ON THE TOOTH—NOT POKING THE GUM.</strong></td>
<td></td>
</tr>
<tr>
<td>3. Wipe the end of the scaler with cotton gauze.</td>
<td>4. Press against the gums to stop the bleeding.</td>
</tr>
</tbody>
</table>

5. **Check to be sure the tooth is smooth.**

With your probe, feel under the gum for any place that is still rough.

When all the sides of the tooth feel smooth, move to the next tooth.

Do not hurry. It is more important to take your time and carefully remove all the tartar. If the person has a lot of tartar, scale only half the mouth now. Do the other half on another day, as soon as the person can return.

**Finally, make the tooth look clean.** Use the sharp edge of either scaler. Scrape away the dark material on the front and back sides of the tooth.

The tooth itself has not turned dark. It is just a stain. People most often get these stains when they eat meat, drink tea or smoke tobacco.

You can scrape away this old food and uncover the white tooth. **But remember:** the teeth will turn dark again if not cleaned carefully every day.
6. **Talk to the person about what you have done and what to expect.** The gums will be sore for the next few days. That is normal.

Then explain to the person what to do to make the gums strong and tough again.

- **Clean your teeth better with a soft brush.** Reach with the brush into the gum pocket, and behind your front teeth. That is where tartar collects most often (page 69).
- **Clean between your teeth.** Use your brush, the stem from a palm leaf, or a piece of strong, thin thread (page 71).
- **Rinse your mouth with warm salt water.** Start with 4 cups a day, to make the gums strong. Then use 1 cup a day to keep them strong (page 7).
- **Eat local foods that give strength to gums.** Fresh fruits like guava and oranges, and fresh vegetables with dark green leaves are good for the gums.

**REMOVING SOMETHING FROM UNDER THE GUM**

If the gum between two teeth is red and swollen, something may be caught inside the gum pocket. Ask what the person has been eating. The object may be a fish bone, mango string, or a sharp piece of tartar.

First try to feel the object with your probe. Then remove it using a scaler or a piece of strong thread.

Use the rounded-tip scaler in the same way as you would to remove tartar.
Feel the object, go under it gently, and then lift it out.

**OR**

Tie a knot in a piece of thread. Then slide the thread between 2 teeth (page 71).
However, do not move the thread up and down. Instead, pull it and the knot out the side. The knot can pull the object out with it.*

* If the gum has grown into a kind of tumor (*epulis*), an experienced dental worker should cut it away.
KEEP YOUR SCALING INSTRUMENTS
SHARP AND CLEAN

A sharp scaler bites into tartar better than a blunt one. Sharpen the edge whenever you feel it sliding over the tartar.

From time to time, feel the cutting edge to be sure it is sharp.

Scrape it against your fingernail. If the cutting edge is not able to cut your nail, it will not be sharp enough to break the tartar free.

Sharpen the cutting edge of the scaler on a fine-grain stone (Arkansas stone). Put a few drops of oil or water on the stone first, so the scaler can slide against it more easily.

Rest your 2nd or 3rd finger against the side of the stone. This is for control.

Rub the cutting edge against the stone. Move it back and forth.

Turn the round scaler as you sharpen it. This helps to keep the scaler’s round shape.

Scalers must be more than clean—they must be sterile. This is because there may be spots of blood on them. Hepatitis (Where There Is No Doctor, page 172) and other diseases can pass from the blood of one person to the blood of another person. To learn how to sterilize, see pages 87 and 88.

Your mirror, probe, and canon tweezers do not need sterilization. A disinfectant (see page 89) will clean them. Dry all the instruments with a towel. Then wrap them inside a clean cloth and put them in your scaling kit. They are now ready for use whenever you need them again.

Remind each person: scaling is not a cure. Rather it is a way of giving her a new start. Only she can give herself the care she needs to keep her gums healthy. You have removed the hard material from her teeth, and if she brushes carefully, the tartar will not return!