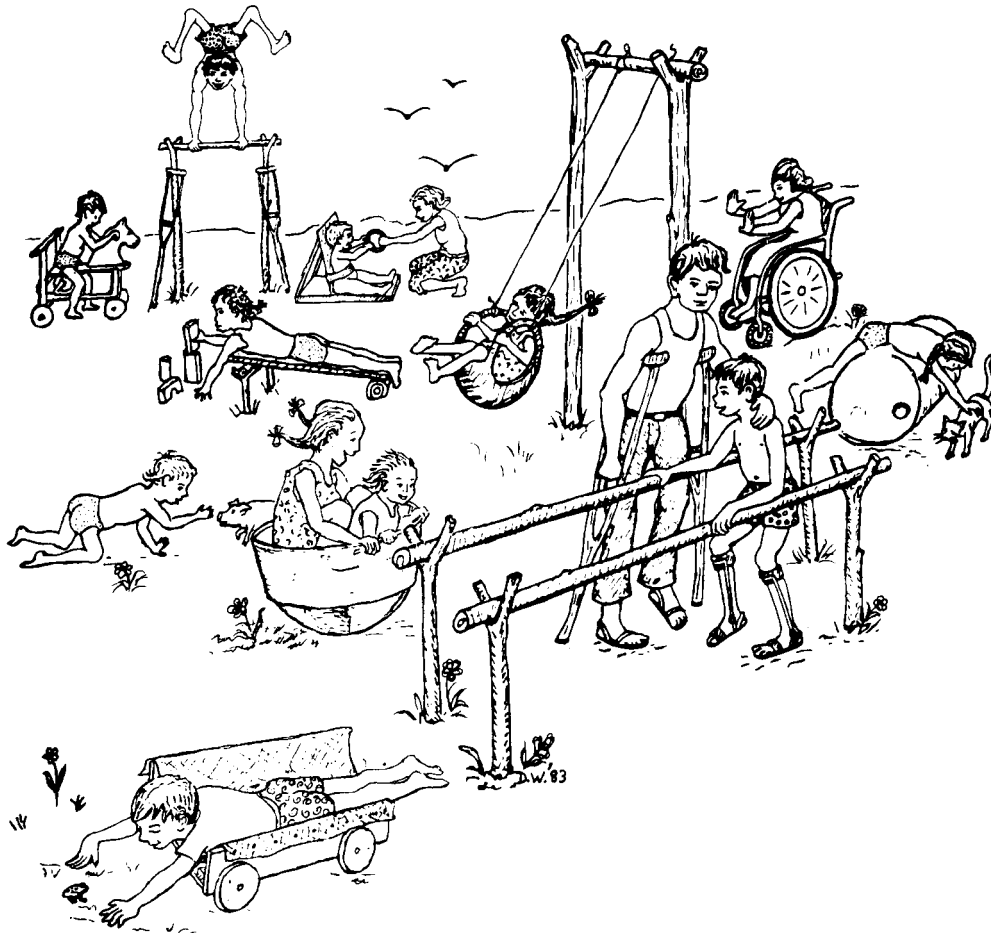


Building a playground “for all children” is a good way to get enthusiastic community participation. To promote community ownership and pride in the playground, teamwork is very important. Be open to all community members sharing their skills and talents, and make sure that decision-making is a group process. All participants, no matter how small their contribution, should be recognized and appreciated equally.



To build the playground, it is best to use local, low-cost materials, and simple construction. One of the playground's main purposes is to give children with disabilities and their parents a chance to try different playthings and exercise equipment. Whatever works for their child, a family can easily build at home, at no or low cost. For this reason, a playground made of tree limbs and poles, old tires, and other "waste" materials is more appropriate than a fancy metal playground built by skilled craftsmen at high cost. (Also, metal gets very hot in hot, sunny climates.)

These pages will give you some ideas for simple playground equipment. Although most of the photos come from PROJIMO in Mexico, many of the ideas shown are based on a playground in Thailand (see p. 425) and on designs by Don Caston (see p. 604).

A “playground for all” built by children—PROJIMO, Mexico

When village health workers with disabilities in the small village of Ajoia decided to start a rehabilitation program for children with disabilities, one of the first activities was to involve the local children in building a playground.



1. First the children went into the forest to cut poles and vines.

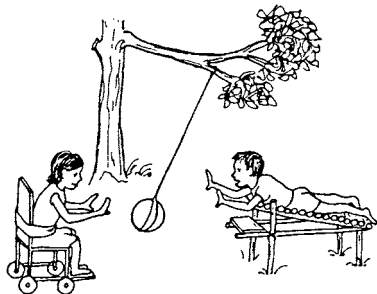


2. These they brought back to an empty lot at the edge of the village.



3. While some children cleaned up the lot, others began to build the playground equipment.

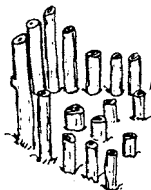
4. They built ramps or “wedges” like this one, which can be used in many ways for play and exercise. Here a child with cerebral palsy walks up the ramp to help improve balance and stretch his feet upwards to prevent contractures.



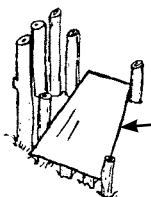
The wedges can also be used by children with severe disabilities to lie on, so that they can lift their heads and play with their hands.



Pole seats like this help a child sit who still lacks balance, or has trouble controlling his position.



Separators will hold apart the legs of a child whose legs pull together due to spasticity.



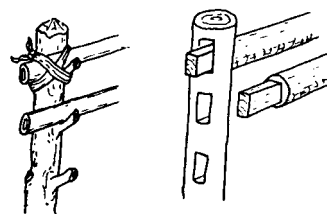
Putting front posts the same height allows a shelf to be placed for play.



Simple parallel bars can be used as gymnastic bars by children without disabilities...

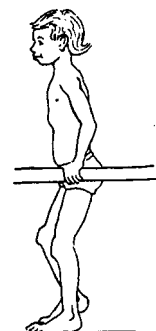


and as bars for learning to walk by children with disabilities.

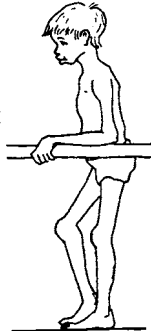


Bars need to adjust to different heights for different children. Here are 2 simple ways.

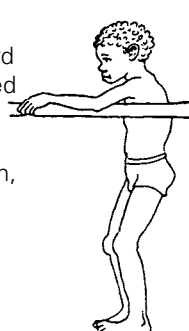
For most children, the bar should be about hip height, so that the elbows are a little bent (the same height as the handles of crutches).



A child with very weak upper arms may find it easier to rest his forearms on the bar. The bar will need to be elbow high.

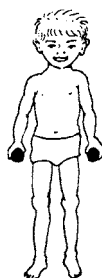


A child who tends to slump forward may be helped to stand straighter if the bar is high, so that he has to stand straighter to rest his arms on it.

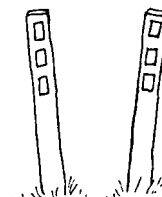


SEPARATION OF BARS

Bars should be close enough to leave only a little room on either side of the child's body. Too close, they get in the way. Too far apart makes weight bearing more difficult.

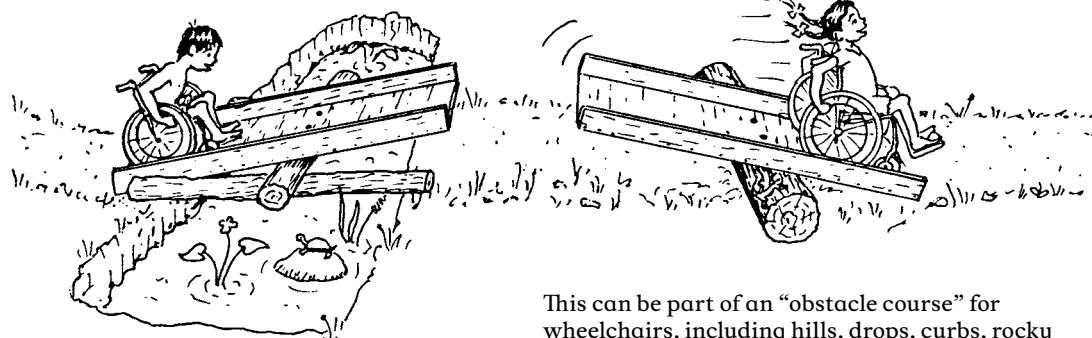


Smaller children require closer bars, therefore, put uprights so they are wider the further up you go.



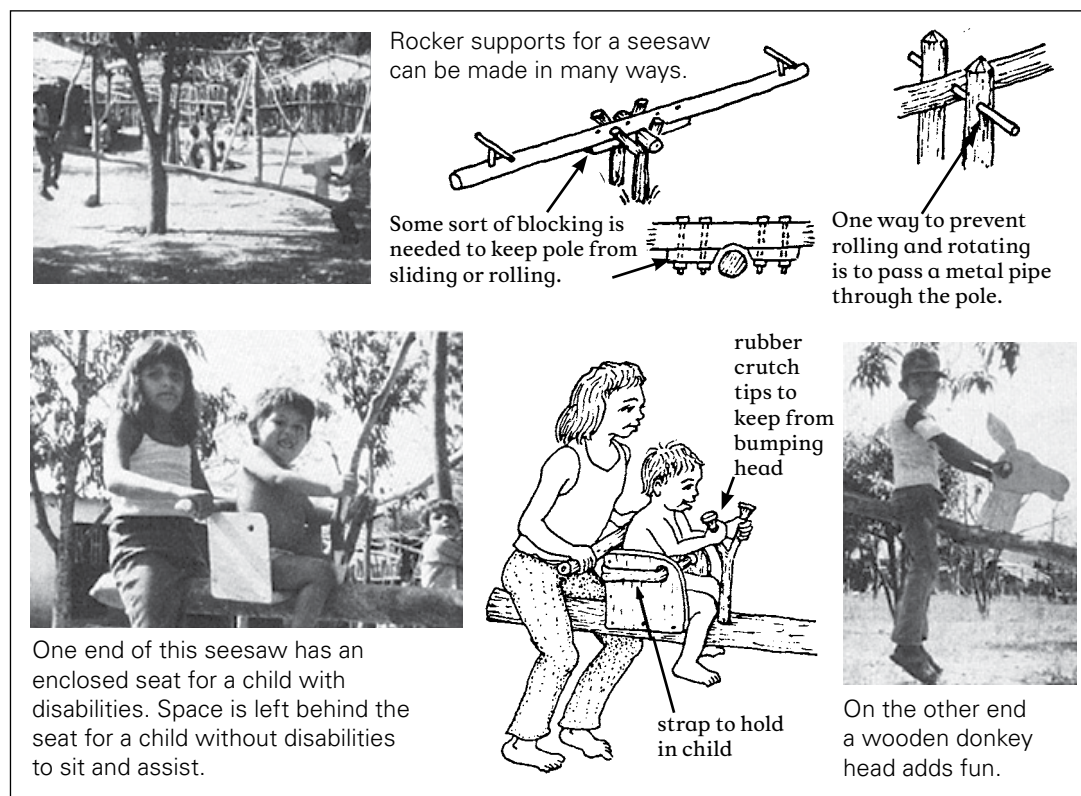
Simple, homemade bars, adjusted to the individual child's needs, often provide more benefit than expensive walkers or other equipment.

TEETER BRIDGE

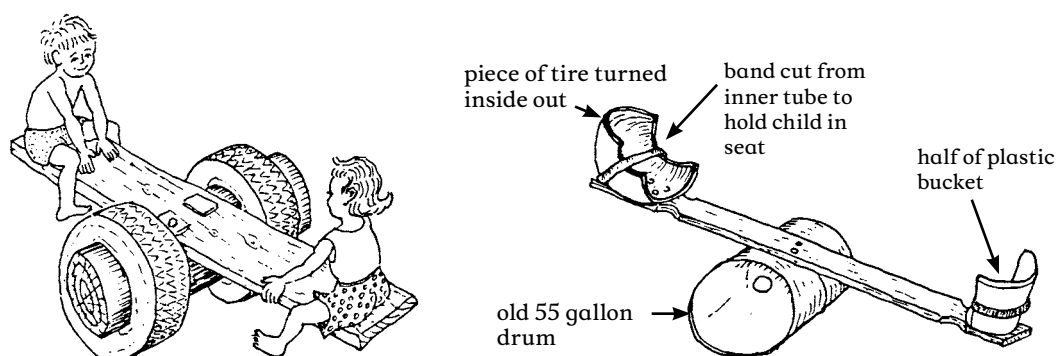


This can be part of an "obstacle course" for wheelchairs, including hills, drops, curbs, rocky ground, sand pits, and zig-zags between posts.

A simple seesaw or **teeter-totter** like this is fun and helps children with disabilities gain balance. The one in the photo was made by putting a pole in the crotch of a mango tree.



Here are some other ideas for seesaws.



PRECAUTIONS

1. To avoid accidents, be sure the pole for the seesaw is strong enough. Test it every few weeks by having 2 adults put their full weight on the ends of the pole.
2. To avoid coming down too hard, put old tires under the ends of the seesaw (see p. 425).
3. Make sure the seesaw will not roll lengthwise or sideways (see above).

For another seesaw idea, see p. 425.

CLIMBING FRAME AND HIGH BAR

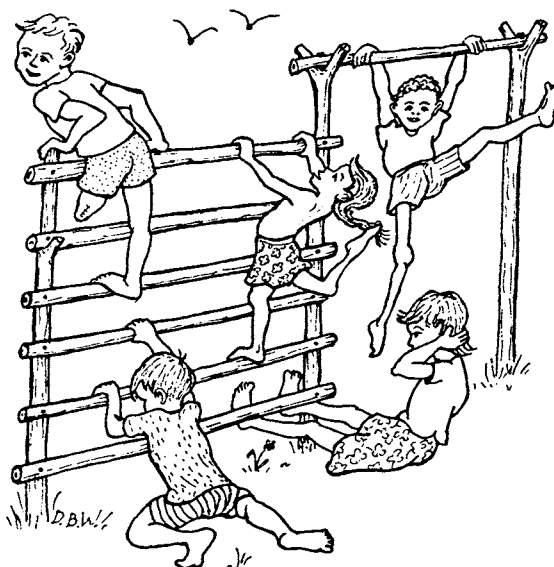
Children can make a simple climbing frame out of poles, by nailing them or tying them together with string.

The climbing frame can be used for all kinds of play, for helping children with disabilities pull up to sitting or standing, and for therapy exercise.

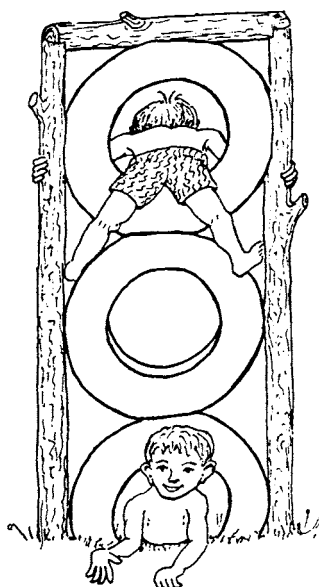
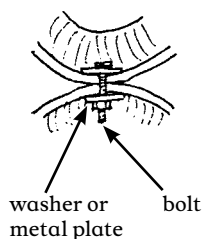
High bars (horizontal bars) at different levels for different children can be used for exercise and gymnastics.

TIRE GYM

Climbing gyms can be made out of many materials, including old tires.



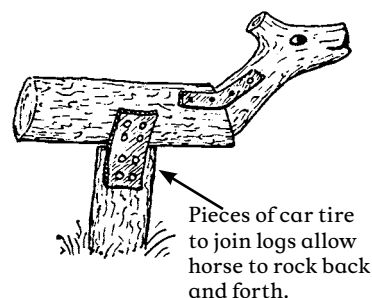
Gym will be more solid if tires are bolted together.



The children in the village of Ajoya, Mexico helped those in a nearby town build their own rehabilitation playground. This tire climbing gym was one of the playthings they created.



Building and riding a rocking horse made of logs.



SWINGS

A wide variety of swings can be built out of different local materials. Swinging is fun; it can help develop balance, head control, coordination, and strength. Swings with specific features can be built for the needs of particular children.



Here children in PROJIMO make an enclosed swing.



This child with cerebral palsy had never had a chance to swing before. At first he was afraid...



but after a while, he loved it.



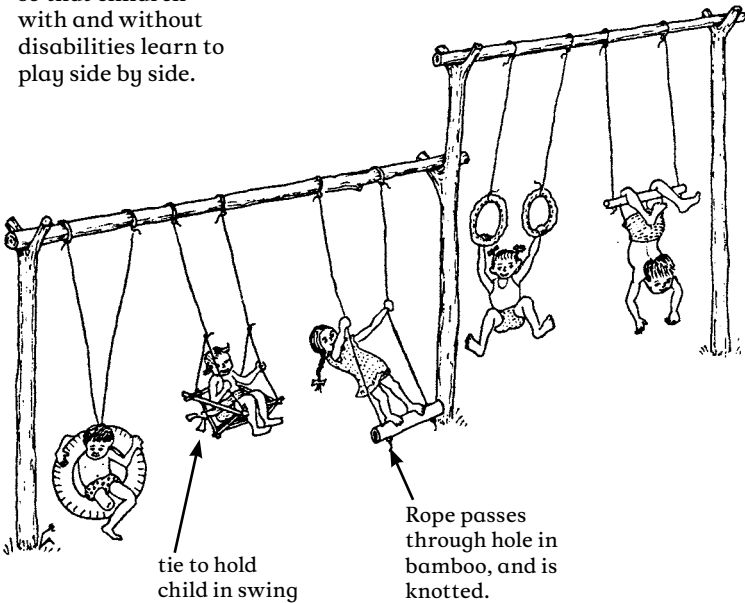
Regular swings are placed next to special and enclosed swings, so that children with and without disabilities learn to play side by side.



Swings in the form of animals or fish add to the fun.

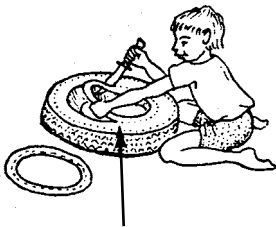


Extra wide swings allow 2 children to swing together—one assisting the other.



tie to hold child in swing

Rope passes through hole in bamboo, and is knotted.

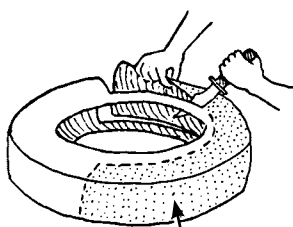
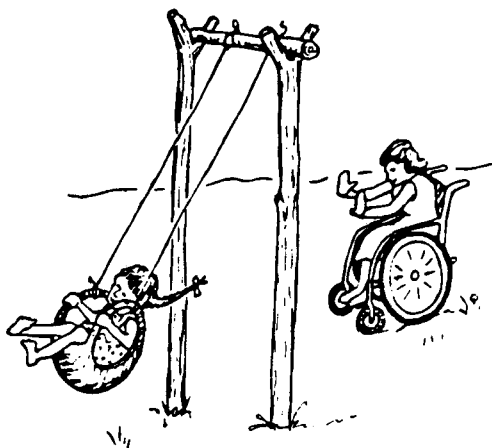


Rings for swinging and many games can be made by cutting out the inner rims of old car tires.

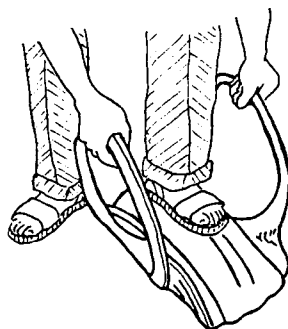
SWINGS AND PLAYTHINGS USING OLD TIRES AND TUBES



This swing made of an old tire is especially good for children with spasticity because it bends their backs, heads, and shoulders forward.



Cut away this part of the tire.



Then turn the tire inside out.

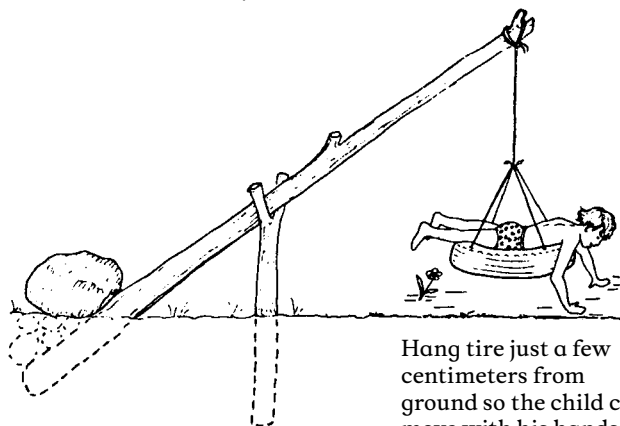


In this swing, a "floor" of sticks can be put in the tire and covered with straw or a mat.

This **flat-hanging tire** swing is especially useful for a child with severe disabilities who is just beginning to learn to move his body. The child can lie across the tire and move this way and that by pushing the ground with his hands.



It swings! It spins! It bounces!
Fun for all children! Several children can play on it at once!



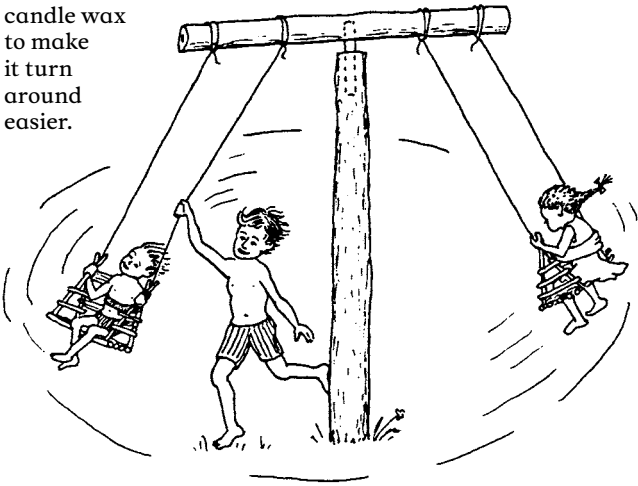
Hang tire just a few centimeters from ground so the child can move with his hands.

WHIRLYGIG CIRCULAR SWING

CP

Hole in beam is coated with candle wax to make it turn around easier.

Cross beam pivots on an iron pipe.



Circular swing in PROJIMO rehabilitation playground. (Here the child pushing the swing has cerebral palsy. The twisting motion he uses is excellent therapy.)

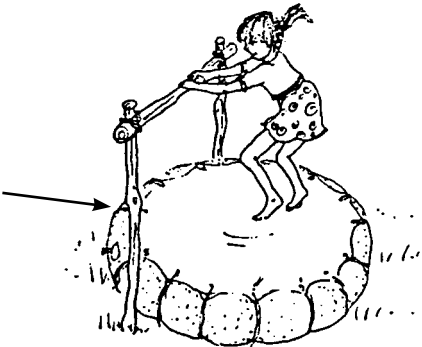
CAUTION: Be sure both the pole and beam are of strong hard wood. Test them occasionally with adults' weight.

BOUNCING TUBE

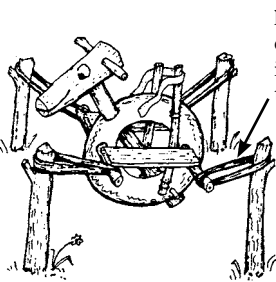
(from *Low Cost Physiotherapy and Low Cost Walking Aids.*)



Piece of strong canvas or animal hide stretched tight over large truck or airplane inner tube.



BOUNCING TIRE HOBBY HORSE (OR COW)



loops of car inner tube



Be sure to notch poles and attach tubes so they do not slip.

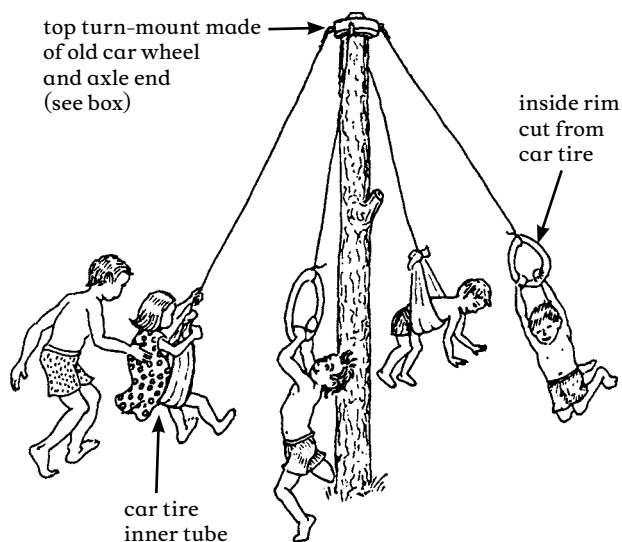
A cow's skull makes a good head for many playground toys. The child holds onto the horns. (Cut off the points.)



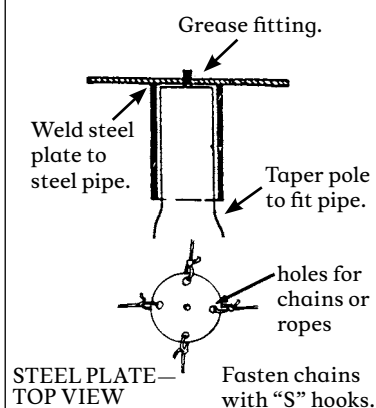
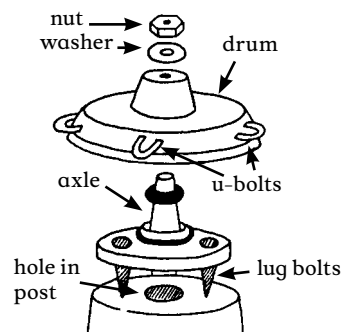
Note: It is much easier to put holes through tires that do not have steel wire in them.

MAYPOLE

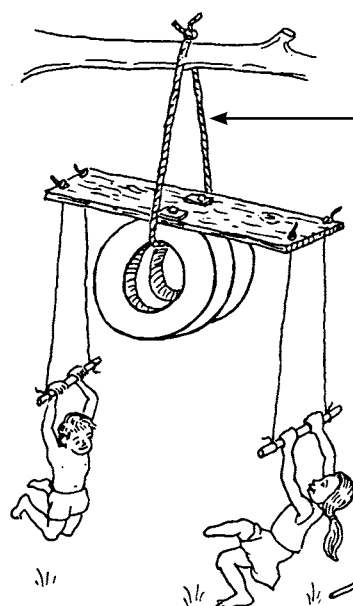
Children with disabilities who can sit and hang on can play with other children on the maypole. But to start turning round the circle, they may need another child to help push them.



HERE ARE 2 WAYS TO MAKE A TOP TURN-MOUNT

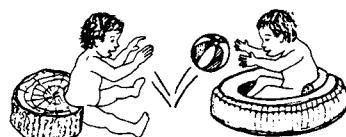


HANGING SEESAW SWING

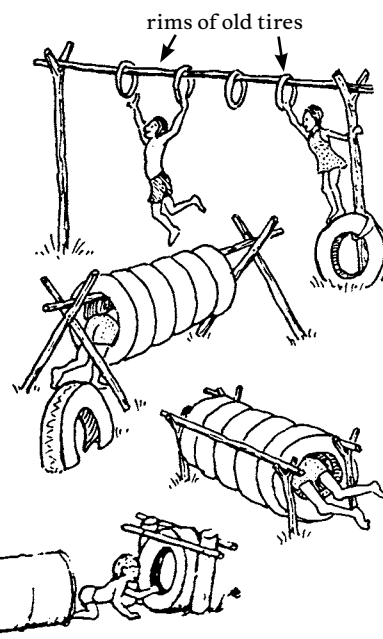


WARNING: Be sure to use extra strong rope or cable in any equipment where children could be seriously hurt if the rope breaks. Adults should test rope strength regularly.

The weight of the tires adds stability for smoother swinging.

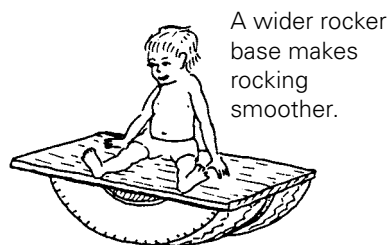
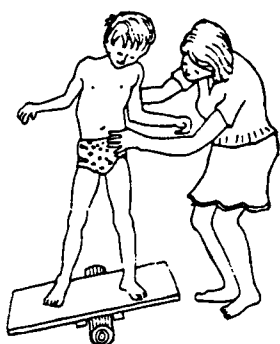


OBSTACLE COURSE



Old tires and drums can be used for crawling games and obstacle courses.

BALANCE BOARDS

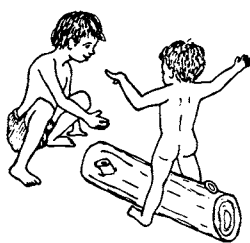


A wider rocker base makes rocking smoother.

For the rocker, you can use 2 pieces of old tire.

For more balance boards and balance beams, see p. 576.

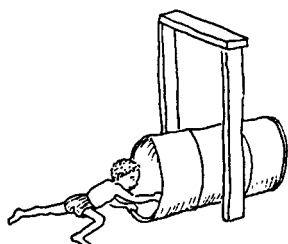
ROLLS



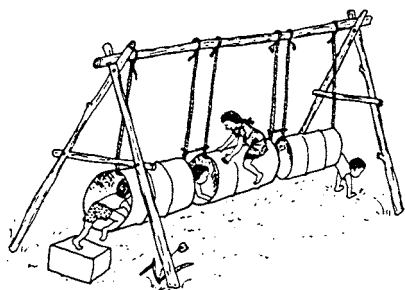
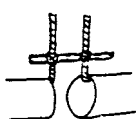
A row of half buried old tires. The tires sink in when stepped on. A test of balance and great fun!

Old barrels, oil drums, paint cans, and logs make good playground equipment—for therapy and fun.

CRAWL-THROUGH DRUMS



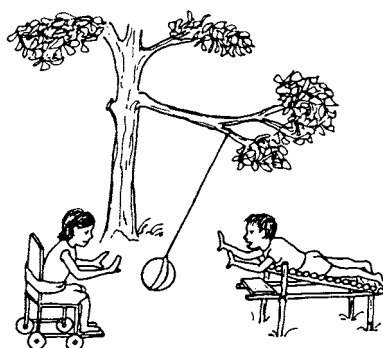
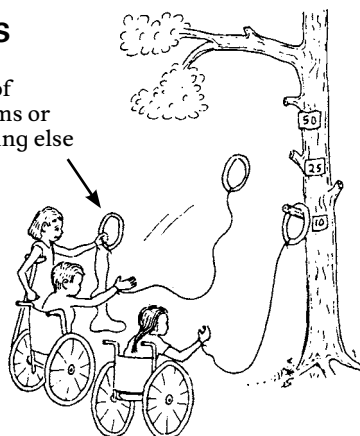
CAUTION: Hold drums apart with sticks to prevent smashed hands and feet.



HANGING CRAWL-THROUGH DRUMS

RING-TOSS

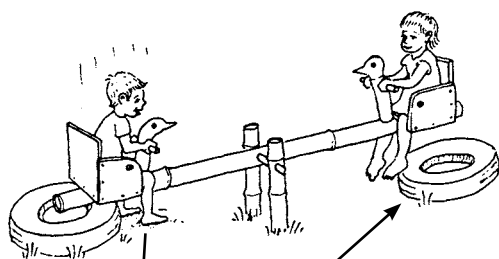
rings of tire rims or anything else



For children who have trouble going after dropped balls or rings, tying a string to the toy allows the children to pull it to them.

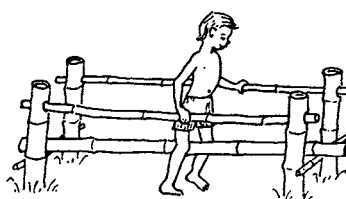
Examples from the "bamboo playground" in the Khao-i-dang refugee camp, Thailand

SEESAW with enclosed seats



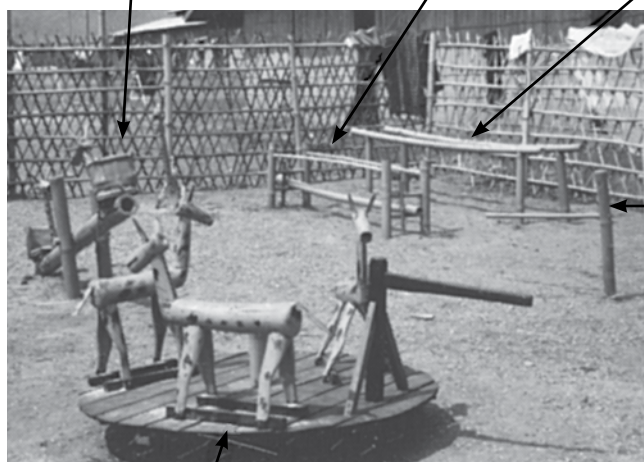
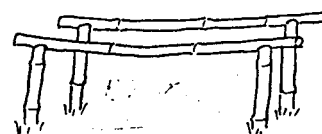
Old tires under ends of seesaw act as "shock absorbers."

PARALLEL BARS for a child whose knees pull together



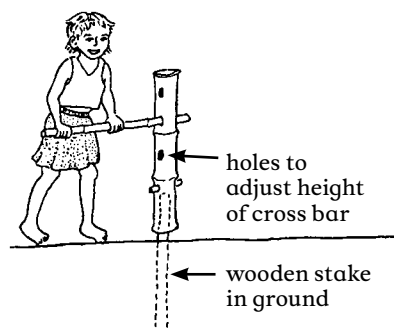
Smooth bamboo pole between legs helps child learn to walk with knees separated.

HIGHER PARALLEL BARS for taller child.

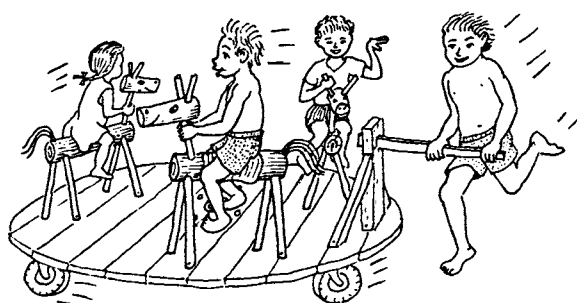


CIRCULAR WALKER

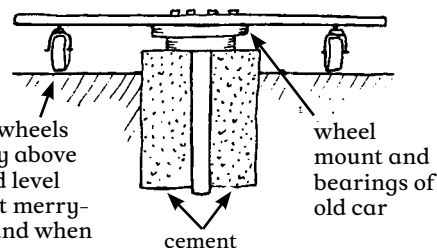
Especially good for the child whose sudden uncontrolled movements may knock over an unfixed walker.



MERRY-GO-ROUND



One way to mount the platform of a merry-go-round.



Small wheels slightly above ground level protect merry-go-round when too many children get onto one side.

wheel mount and bearings of old car

cement

PRECAUTIONS AND SUGGESTIONS FOR A SUCCESSFUL ALL-CHILDREN'S PLAYGROUND

1. Involve as much of the community as possible in building and maintaining the playground.
2. Keep the playground simple and build it from local low-cost materials. In this way it can serve as a model for families of children with disabilities to build the most useful equipment for their child in their own homes. Resist offers from the local mayor or politicians to build an impressive metal frame playground. This will eliminate community participation and makes the equipment too costly for poor families to build at home.
3. For poles that are put into the ground, use a kind of wood that does not rot quickly. Do not use preservatives. Most have toxic side effects that are likely worse than any benefits.
4. To avoid accidents, **check strength of poles frequently** and replace them at regular intervals—especially during the hot rainy season.
5. Swings can be hung from ropes or chains. Rope or vines are cheaper but may rot or wear through fairly quickly. Plastic or nylon rope will not rot in the rains, but will gradually grow brittle and weak with the sun. As with posts, **to avoid accidents, check the strength of ropes frequently** by having several heavy persons hang on them at one time. **Replace ropes at regular intervals**, before they get weak.
6. Regular maintenance of the playground is essential, and this will require planning and organization. Perhaps once a month the village children can take an expedition to cut new poles to replace rotting ones, to repair old equipment, and to build new. Adult coordination of such activity is usually necessary.
7. To boost enthusiasm, keep lists in a public place of all the children and adults who help with the playground—and put a star for each time they help.

Children play on a “merry-go-round” in PROJIMO. Enclosed “cars” protect children with more severe disabilities. A cow’s skull provides handles for a rider.

