

When No. 1 man gets to floor he wishes to connect on, he swings in and steps down on balcony floor, then at once pulls up slack hose onto balcony until No. 2 man swings onto balcony and goes up inside fire-escape steps to next floor level. No. 1 man giving him sufficient slack.

No. 1 man now connects hose to the stand pipe, removes rope from hose, puts extra hose over balcony railing, disconnects hose rope from belt, places rope with snap around hose making slip noose. (This should be on line leading back from pipe.)

Then put other rope around railing or balcony, or rung of fire-escape ladder, and fasten large snap into ring of swivel snap.

Be sure to snap into ring of swivel snap and not onto rope as this will prevent it pulling tight and can be easily unsnapped. If convenient, rope need not be unsnapped from belt for this operation.

#### TO CARRY HOSE WITH PIPE DOWN FIRE-ESCAPE FROM POSITION JUST DESCRIBED

No. 1 man lifts hose up to give slack enough so he can unsnap large snap from ring of swivel snap; then unsnaps rope from around hose and snaps swivel snap into No. 1-D ring (No. 2 man has placed belt over shoulder and started down inside stairway at same time), then plays slack hose for No. 2 man over balcony.

When No. 2 man has reached balcony and can handle his part of hose, No. 1 man puts his rope around hose near female butt in regular way and then disconnects hose from stand pipe. No. 2 man lets all slack over balcony and climbs out on ladder and starts down.

No. 1 man places belt on shoulder, lets all of his slack over balcony and climbs out on ladder and starts down, men to go down close together so as to equalize load.

All slack should be let over balcony before men climb out on ladder. If they don't, when slack drops over it will cause a heavy jerk.

#### CARRYING HOSE UP FIRE-ESCAPE AND FASTENING TO LADDER

Men remove belts by proper method. Unsnap both large snaps, leaving swivel snap fastened to No. 1-D ring. Place one rope around hose and snap onto rope making slip noose. Place men at proper distance on hose and with belts over right shoulders; go up ladder, each man keeping just a little slack in hose, thus allowing the man ahead of him to carry his own load, man with pipe to go first.

When ready to fasten to ladder, men take regular leg hold and take loose rope (which was unsnapped on ground before they started up as this saves time) putting snap around rung or side-rail of ladder or fire-escape, and snap into ring of swivel snap (not onto rope), thus making it easy to unfasten if hose is moved later.

The belt can now be dropped off of shoulder or unsnapped from swivel snap and carried with men, leaving hose lying close to ladder and in a straight line.

No loops to kink or cause interference with men going up or down ladder.

To move hose up or down have belts fastened to swivel snap, take leg hold, place belt over shoulder, lift hose with full strength of body, legs and arms so as to make rope slack, unsnap large snap from ring of swivel snap, thus leaving weight of hose on shoulder.

The hose can be fastened or unfastened from ladder in five seconds after a man has his leg hold.

#### TO CARRY CHEMICAL HOSE UP LADDER OR FIRE-ESCAPE

Men use same method as carrying large hose, except that rope is wrapped around chemical hose twice and large snap is snapped into ring of swivel snap. By this method, the rope grips the hose so it can't slip.

#### OTHER USES OF BELT

Belt is also useful for articles that are awkward to carry up fire-escapes and ladders. Such articles as pike poles, axes, pitch-forks, coils of rope, crowbars, small chemical extinguishers, tarpaulins, saws, roofing ladder, ceiling hooks, circulating nozzles with hose, balcony sets, door openers, roof cutters, 1½ inch hose, wrecking hook with chain and pole, shovels, scoops, sledges, picaroons, nozzles, siamese connections, battering rams, and hose rollers can be carried with safety and a great saving of time to upper floors when needed.

Articles with smooth handles, such as axes, crowbars, pike poles, etc., may be fastened securely by wrapping ropes spirally around them, being sure to pass ropes first over, then under, each other several times before fastening snaps together. This prevents them slipping when being carried, as their own weight binds them. All equipment carried on fire-escapes with these belts hang directly back of the fireman, allowing the free use of his body, arms, and legs, at all times.

Belt can also be used to fasten lines of hose to timbers, or to drag hose, or can be lengthened out and ropes snapped in rings, making a strong piece of equipment several feet long for tying or fastening any article or piece of equipment. It is flexible, strong, light, and serviceable, made of the best material obtainable, and is simple in its uses.

#### PICKING UP MAN FROM GROUND

Lengthen belt about one foot by adjusting buckle for this work.

1. Roll victim on back and place both arms close to body; unsnap all snaps and fasten swivel snap in No. 2-D ring. This equalizes the size of the loops. Lay belt on chest of victim. Place ropes around legs by passing inside of crotch, and snap one into ring at end of belt, the other into "take-up" snap.

2. Belt is now fitted on person to be carried.

3. Crawl into belt with back to victim, reach over and pull one arm of victim between belt and shoulder as far as possible, at the same time getting as high up through belt as you can.

4. Next reach back and get hold of his outside leg, bringing it over and under yours with a regular wrestling hold, pull and hold victim tight to body, at the same time turning over on face, which brings victim up on back.

5. Now get up on hands and knees, keeping load balanced. Next get up carefully, then to standing position.

6. Take hold of hand of victim that is under belt and with a short jerk hunch him up so as to get him well balanced on your back, at same time pulling his arm through under belt as far as you can with his elbow lying well across your chest, so that he lies close and tight to you. This fastens and binds him by his own weight, making it impossible for him to fall or even pull loose, at the same time leaving the arms of the carrier free. He can now be carried any place with safety.

#### SHERK SAFETY AX BELT

Head of ax is fully protected in every way, preventing any possible injury to wearer or any of the men working around him.

Weight is carried over shoulders with adjustable belt which allows men to carry ax well up under arms or at any height they desire, which is more convenient than around waist.

It is held securely in place even if men run, stoop over, fall down, climb up or down ladders, crawl in windows, or on hands and knees in close places, and can be readily and easily removed or be replaced by the wearer even with heavy woolen gloves or cold hands.

Belt is strong and serviceable, made of the best material, and when carried on apparatus ax is always in place. The adjustable waist belt can be buckled in front or on side of wearer, as he wishes, by sliding it through loop, thus bringing it to a convenient position for anyone if he carries ax on right or left side.

# SHERK Hose and Life Belt

for  
Fire  
Departments

SAVES VICTIMS, AIDS  
HOSE HOLDING AND  
GIVES FREEDOM TO  
ARMS AND LEGS

DISTRIBUTED BY

### ARMS RELIEVED OF HOSE

"With the new hose belt equipment, however, the pressure of the hose is removed from the arms and is distributed by the belt over the shoulders and body of the firemen, leaving their hands and arms free to direct the stream at will. Two men under test, wearing the belts, have handled a water pressure of 275 and 300 pounds successfully, ordinarily a big task for four or five men—and have played the stream at will without undue strain or tiring under 100 to 200 pounds pressure."

The belt is light and strong, a combination of leather and rope of the very highest quality assembled with snaps and buckles on a scientific and mathematical principle that distributes the weight. Authentic tests show the breaking-point of these belts to be well over three-quarters ( $\frac{3}{4}$ ) of a ton. It can be used for carrying fire victims down ladders and fire-escapes, still leaving the fireman's hands, arms and legs free. The belt principle is such that the victim is held by his own weight to the rescuer. It is a simple, quick operation to put the victim into the belt, and once set there is no danger that he will fall.

The belt has also proved valuable to firemen in carrying both water and chemical hose, crow-bars, pike poles, fire extinguishers, roofers and the like up ladders and fire-escapes without danger of dropping them.

Should the emergency arise, the belt can be unsnapped so that it virtually becomes a rope eight feet long, and there are situations wherein such a piece of equipment would prove a boon to fireman and fire victim alike.

### AUXILIARY BELT INVENTED

As an auxiliary to the hose and life belt, a new ax belt also has been perfected by the same member of the Portland department. The main departure in this belt is that the weight is suspended from the shoulders rather than from the waist. This permits the fireman to run, climb and crawl in and out of tight places with his ax handy, but at the same time not dangling about his legs and threatening to trip him and probably cause serious injury. The new belt provides protection also against the blade and point of the ax, being held in a leather shield securely but available for instant action.

### TO WHOM IT MAY CONCERN

It has been an established practice ever since Fire Departments have been organized (both volunteer and paid), for the men to wear some kind of a girdle or belt when working at fires. This was originally a mark of identification for a few of the bravest ones, indicating the wearer was willing to risk his own safety if need be to save property and lives of others when in danger.

The wearing of this girdle or belt was considered an honor, and the wearer was looked upon as a brave and heroic fellow.

So this practice was passed on to the succeeding generations until a belt was considered part of a fireman's regular equipment. Because it allowed him to bind his fire clothes close to his body, thus protecting him from water and heat, also helping to overcome the handicap of working and crawling in close places with loose flapping garments.

Later, when water mains, hydrants and hose were introduced, a wrench or spanner was needed by firemen to connect and disconnect this equipment. The belt was the logical place to carry it.

As far back as any of us can remember in fire department work, the only real practical use of the leather belt has been to carry this wrench or spanner. Believing that this strong leather equipment could be developed to meet other needs of fire service in many ways, experiments were made over a period of several years with many kinds of material, such as leather, rope, hemp braid, cotton webbing and even small bronze cable, but always finding that good leather and rope were the most practical for all-round fire department use. The Sherk Combination Hose and Life Belt for Hosemen, and Sherk Safety Axe Belt for Truckmen, were adopted by the Portland, Oregon, Fire Bureau in 1926, and after years of daily use under actual fire work and department drills they have fulfilled all claims made for them.

These belts are manufactured by a firm which is nationally known for its many leading leather products. They select the finest grade of belting leather for these belts. The rope used is the best obtainable, being genuine Western lariat quality, 4-strand, extra long fiber,  $\frac{7}{16}$ " diameter. It has a breaking strength of over 2000 lbs.

The snaps and rings used are extra heavy. These all go to make a very husky piece of equipment. These belts are guaranteed against defective materials and workmanship when delivered. Any one interested in this equipment wishing further information may write to

CAPT. A. L. SHERK,  
Bureau of Fire, Portland, Oregon.



(The Sunday Oregonian)

## Fire Bureau Gets New Sherk Belts

MEMBER'S INVENTION HAILED HERE AND  
OVER NATION

### DEVICE SAVES VICTIMS

EQUIPMENT AIDS HOSE HOLDING, GIVES  
ARMS FREEDOM AND CUTS  
LIFTS DOWN

The Portland fire bureau has been equipped fully with a new type of safety hose and life belt invented and developed by a member of the bureau, Captain A. L. Sherk.

As a result of tests made here, fire-fighting experts believe that the new belt may be expected to become standard throughout the United States.

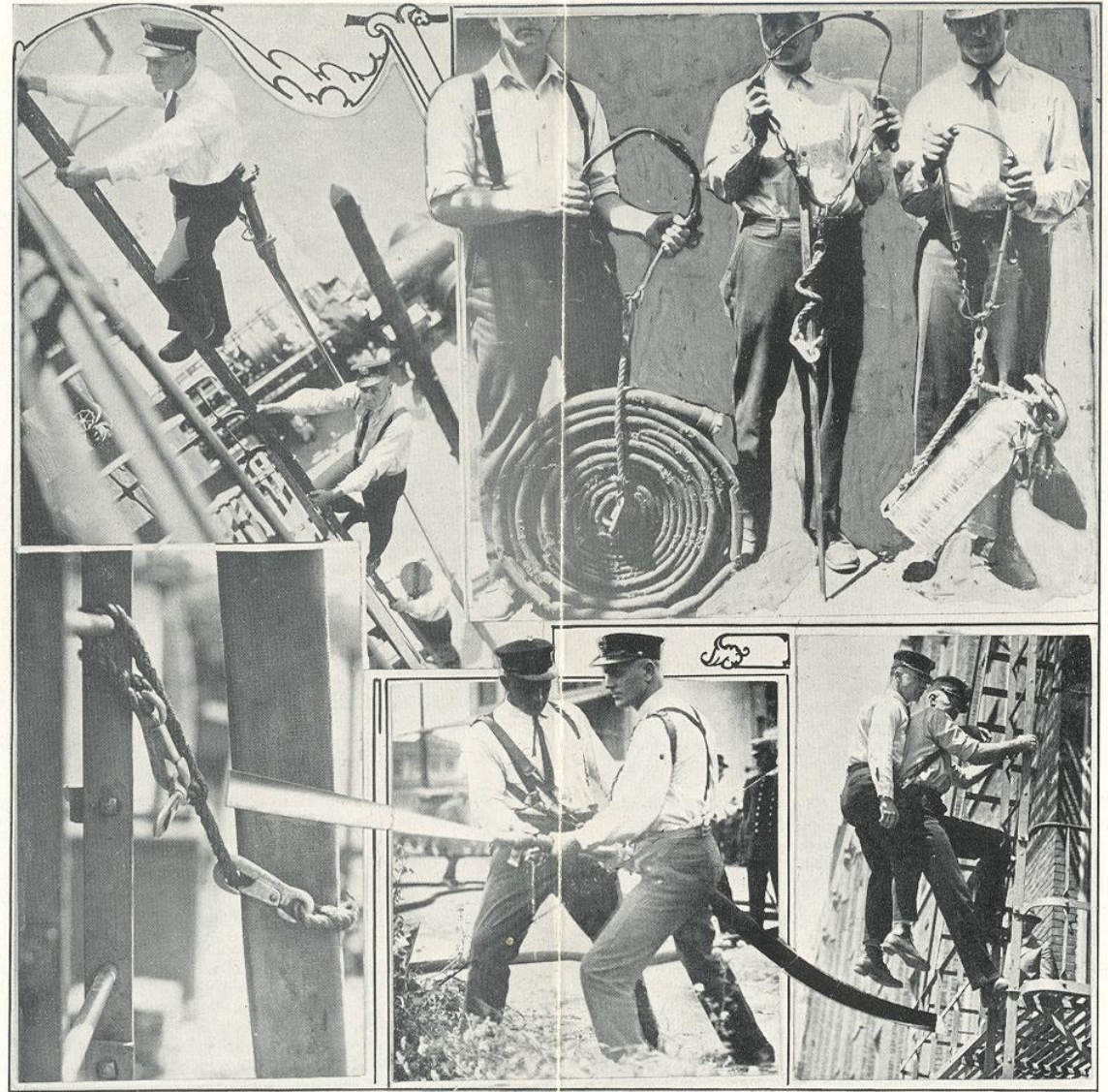
During a recent fire-fighting demonstration one of the belts was used in carrying a man down 15 stories from the top of the Yeon building on the perpendicular outside fire-escape ladder, a feat which, it was said, never before had been duplicated.

Tried out in actual fire-fighting service, the belt stood the test and proved to be so meritorious that it was decided to equip the entire bureau with it.

The belt is effective primarily for hosemen, according to Captain Sherk. "Ordinarily two men handling a hose carrying even 100 pounds of water pressure have their hands full," he said. "Only those who have attempted to hold a hose under such conditions or who unluckily may have been struck by such a stream of water can appreciate the tremendous force it exerts.

"The customary procedure followed by hosemen assigned to the nozzle is to place the hose under the arm and to hold it there against the body, with other men behind to steady it, in order to direct the stream on the fire. The position is awkward and tiresome. The arms soon become cramped, and there is not the freedom of action essential to the highest efficiency in placing the water where it will do the most good.

THE SUNDAY OREGONIAN, PORTLAND, JUNE 20



At top from left, reading down: Captain W. W. Bray, Hosemen O. P. Baker and Paris E. Emery taking line of hose up fire escape. Top right: Hosemen G. B. Johnson, W. G. Balke and C. E. Famme showing some of the different uses of the belt. Bottom left: View of belt rope as used in fastening hose to fire-escapes and ladders. Bottom center: Hosemen Walter Rasmussen and J. W. York guiding a high pressure stream. Bottom right: Hoseman J. A. Nelson carries R. A. Coffelt down fire-escape.



## SPECIFICATIONS

### Sherk Fire Belts

- Material:** The leather used in the Sherk Fire Belts, in their entirety, is selected first grade harness leather. Process of curing this leather is by the oil tanned method.
- Hose Belt:** It is cut in one piece,  $1\frac{1}{2}$ " wide by 66" long (no splicing). When made up for use, it is adjustable, 33" to 54" waist measurement.
- Hardware:** All snaps and buckles are from fine grain malleable cast iron. They are durable and proven to be over strength through years of fire service. Rings are heavy duty, and tempered steel wire, electric welded. One snap at end of belt. One "D" ring (painted red) is 6" from this end snap. Another "D" ring is 7" from the end snap. This end snap and both "D" rings are separated by leather blocks, securely held in place by double riveting and sewing. The 3" loop between end snap and red ring (#1 ring) is for carrying a spanner. (This is optional). Another snap is spaced 12" from the second ring. This snap is single riveted and sewed in position. Leather blocks are left out here to allow for better flexibility. A Conway buckle allows for quick and easy adjustment for waist size. A sliding leather keeper serves to keep the third "D" ring in place at other end of belt.
- Rope:** The rope is  $7/16$ " diameter, four (4) strand, Western lariat, made from first grade, long fiber, genuine Manilla hemp. Factory tests, complying with the U.S. Bureau of Standards, give a tensile strength of nearly 1800 pounds minimum. Each rope is 4 feet long, looped, and snugly fitted at its center through a swivel snap ring, and has a two (2) way wrap to anchor it where it is looped and inter-passed through itself. Each end of this rope is passed through a solid eye snap and spliced with a three(3) way tuck. These splices are wrapped and anchored by hand sewing with waxed sail twine. The strands of the splices are cut off well above this hand wrapping to prevent any possibility of their pulling before they get set. Each rope is 15" long between crotch at ring of swivel snap and eye of the end snap. This type and quality of rope gets very flexible with use, and shows no perceptible swelling when wet.

### Safety Axe Belts

(For standard size and light weight fire axes)

- Axe Sheath:** The design, quality, and workmanship are identical for both sized belts. It is made from one piece of leather, sewed and riveted where it joins at rear edges with a welt between. An adjustable keeper for point of axe is held in place by a locking strap over top of axe. This strap with its Push-Pull snap allows quick and easy operation to release axe with cold or gloved hands. This sheath completely encloses the axe head, and securely holds the axe



## Specifications - Axe Sheath (Con't)

at all times while it is in the sheath, even if the wearer falls, stoops over, crawls, climbs ladders, etc. A metal aluminum guard is built inside to prevent blade from cutting leather.

**Straps:** Shoulder straps are  $1\frac{1}{4}$ " wide on standard size belt and  $1\frac{1}{4}$ " wide on the smaller one. The shoulder strap going over the shoulder is 50" long on each belt. The shorter section is 22" long, with a roller heel buckle and keeper for end of the longer shoulder strap. The waist strap for each belt is 1" by 50" with buckle at the end. All straps are cut to fit, and riveted through back portion of sheath. The strap arrangement allows axe to be supported over shoulder and across body, (which is preferable to single belt around waist) and at desired height. The waist strap can be pulled through the loop at back of sheath to accommodate the position for buckling at either side or front. This strap holds axe from slipping back and forth around waist. Axe can be carried on the right or left side.

**Ring:** Steel ring at bottom of sheath is for carrying short length of rope.

See Brochure: Page 6, Subject #14, Picture #20.

GuaranteeFire

All new Sherk Belts are guaranteed against defective material and workmanship when delivered. In case of any defects, return merchandise C.O.D., without being used, and necessary information. Replacement will be made to purchaser, prepaid.

*A. L. Sherk*  
A. L. Sherk  
1594 Umpqua Road  
Woodburn, Oregon 97071  
Phone (1) 981-9257

IMPORTANT NOTICE

As of April, 1963, the two (2) fine grained, malleable cast iron snaps on the leather belt have been replaced by Safety 3400# Tested snaps. These replaced snaps have proven satisfactory in every way over a period of many years in the tough usage of the fire service. This is the only change ever made in the Sherk Hose belt from its original design or material. This change makes for a stronger and more rugged piece of equipment. It also allows for easier and quicker operations in the many uses of the belt. The additional cost of this change is absorbed at the manufacturing end and is not passed on to equipment dealers or final users.