


## Elementary Gymnastics

## on Apparatus.

## BY

E. H. ARNOLD, M. D., Director of New Haven Normal School of Gymnastics.


Frances N. Boynton, M. D..

INSTRUCTOR IN GYMNASTICS IN NEW HAVEN NORMAL SCHOOL OF GYMNASTICS.


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THE need of a handy guide in elementary apparatus work for the students of the New Haven Normal School of Gymnastics has been keenly felt since I have taken charge of this work at the above school. There are many more exhaustive works on the subject, but none that would exactly meet the requirements. On the one hand, massive volumes can not be used to advantage on the floor of the gymnasium. Handbooks in English, on the other hand, are few, and of these few, none proved suitable for my method of teaching. I have been too busy to write books, and therefore gladly availed myself of the services of Miss Frances N. Boynton, who undertook the compilation of the work done in the Junior year at our school. This pamphlet is the result of her labors. It is, of course. only a skeleton; that is all it need be for my purposes. As for the use of it by others, the teachers must add flesh and blood and lend animation to it if it is to be of use. The education of teachers of physical traininghas come to a point where the graduates of the better Normal Schools of Gymnastics will readily be able to do this, if indeed they need a handbook at all.
E. HERMANN ARNOLD.

New Haven, June, '96.


A second edition of this guide is herewith presented. No material changes have been made. None seemed necessary for the use of the book in our school; other teachers using the pamphlet have not suggested any. The only alterations made have been in the nomenclature. The revision of the gymnastic terms, as well as the preparation of this edition for press, are the work of Miss S. M. Haupt (N. H. N. S. G., '99), whose co-operation I herewith gratefully acknowledge.
E. H. A.

New Haven, Jan., 1900.

The third edition of this pamphlet sees it practically unchanged. Exercises on the Giant Stride have been added. For facilitating annotations the booklet has been intershot with blank pages.
E. H. A.

New Haven, Sept., 1904.

## DEFINITIONS.

A position is frontways when the gymnast is facing the apparatus; sideways when the gymnast's side is towards the apparatus; rearways when the gymnast's back is towards the apparatus.

A side position is a position in which the broad axis of the body of the gymnast is parallel with the long axis of the apparatus.

A cross position is a position in which the broad axis of the gymnast is at right angles to the long axis of the apparatus.

A vault is "flank" when one side of the body is turned toward the apparatus in passing over; "front," when the front of the body is turned toward the apparatus in passing over; "rear," when the back is turned toward the apparatus in passing over.

A squatting vault is one in which the knees are drawn up to the chest in passing over the apparatus.

A straddle vault is one in which the legs are in the straddle position in passing over the apparatus.

A squat-straddle vault is one in which one leg squats and the other leg straddles in passing over the apparatus.

## ABBREVIATIONS.

Ly. =lying.
Sitt. $=$ sitting.
Std. $=$ standing.
Forw. =forward.
Sdw. =sideward. R. =right.
Bckw. $=$ backward. L. $=$ left .

Fwy. $=$ frontways. Strl. =straddle. Swy. = sideways. Alt. =alternately. Rwy.=rearways. Str. =straighten. Pos. $=$ position. Ex. $=$ exercise. App. $=$ apparatus.

## POSITIONS.

A. Hang-standing.
a. Frontways.
b. Sideways.
c. Rearways.
B. Hang-lying.
a. Frontways.
b. Sideways.
c. Rearways.
C. Free-hanging.
a. Hand-hanging.
b. Upper-arm hanging.
c. Hand-upperarm hanging.
D. Hand-knee hanging.
E. Rest-standing.
a. Frontways.
b. Sideways,
c. Rearways.
F. Rest-lying.
a. Frontways.
b. Sideways.
c. Rearways.

Position in which part of body weight is suspended from upper extremities, but most of it is born by lower extremities.

Position in which part of body weight is supported by lower extremities but most of it is suspended from upper extremities.

Position in which all of body weight is suspended from upper extremities.

Position in which body weight is suspended from hands ( 1 or 2) and knees (I or 2).

Position in which part of body weight rests on upper extremities, but most of it is supported by lower extremities.

Position in which part of body weight is supported by lower extremitires, but most of it rests upon upper extremities.
G. Resting.
a. Frontways.
b. Sideways.
c. , Rearways.
H. Hang-resting.
I. Standing.

Position in which body weight rests entirely on upper extremities.

Position in which body weight is partly suspended from one upper extremity and partly supported by the other.

Position in which body weight rests entirely on lower extremities.

## HORIZONTAL BAR.

Note- -Stationary apparatus with undivided suspension or supporting surface.
A. Hang-standing.
B. Hang-lying.
C. Free-hanging.
D. Hand-knee hanging.
E. Rest-standing.
F. Rest-lying.
G. Resting.
H. Hang-resting.
I. Standing.
X. Exercises involving a change from one position to another.
Aa. Hang-standing frontways.
Side stand fwy. close to bar, head high ; grasp. with 2 hands upper [lower or mixed] grip, shoulder-width apart ; fall back, straighten arms.

Exercises.
Head. $\left\{\begin{array}{l}\text { I. Lower and raise. } \\ \text { 2. Turn. }\left\{\begin{array}{l}\text { R. } \\ \text { R. } \\ \text { L. } .\end{array}\right.\end{array}\right\} \begin{aligned} & \text { sdw. } \\ & \text { bckw. }\end{aligned}$

Trunk. $\left\{\begin{array}{l}\text { 5. Turn }\end{array}=\begin{array}{l}\mathrm{R} . \\ \mathrm{L} .\end{array}\right.$
Legs. $\left\{\begin{array}{l}\text { 6. Raise and lower. }\left\{\begin{array}{l}\text { forw. } \\ \text { 7. to } 1 \text { (R to r.) } \\ \text { 7. Raise knee forw. } \\ \text { 8. Raise heel bckw. }\end{array} \text { ( to r (R to l.) }\right.\end{array}\right.$
Ab. Hang-standing sideways.
Cross-stand swy. close to bar, head high; grasp L. [R.] upper grip; fall sdw. R. [L.] str. L. [R.] arm.

Exercises-As in Aa.
r, 2, 3, 5, 6 (add bckw., omit L. to r. [R. to.1.]), 7,8 .
Ac. Hang-standing rearways.
Side-stand rwy. close to bar, head high; grasp bckw. 2 hands upper grip, shoulder-width apart; fall forw., extending arms.
Exercises-As in Aa.
I, 2, 4, 5, 6 (add bckw., omit forw.), 7, 8 .
Ba. Hang-lying frontways.
Side-stand fwy. close to bar, shoulder-high or lower ; grasp 2 hands upper grip; lay out L . [R.] forw.; close R. [L.] foot to L. [R.] ; soles of feet on floor, hips raised, arms strd., head erect.
Exercises-As in Aa.
I, 2, 3, 4, 5, 6, 7 .
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Bb . Hang-lying sideways.
Cross-stand swy. close to bar, shoulder-high or lower; grasp L. [R.] upper grip; lay out L. [R.] sdw.; close R. [L.] foot to L. [R.] ; under foot on floor, upper foot resting on side of under foot ; hips raised, L. [R.] arm str.

Excrcises-As in Aa.
I, 2, 3, 5, 6 (add bckw., omit L. to r. [R. to 1.]) 7, 8.

Bc. Hang-lying rearways.
Side-stand rwy. close to bar, shoulder-high or lower; grasp bckw. 2 hands upper grip; lay out L. [R.] bckw.; close R. [L.] foot to L. [R.] ; toes only on floor, arms str., hips depressed, chest arched, head erect.
Exercises-As in Aa. I, 2, 4, 5, 6 (add bckw., omit forw.) , 7, 8.
Exercises involving a change from one of the above hang-ly, positions to another:
r. Hang-ly. fwy. ; remove R. [L.] hand ; replace.
2. Hang-ly. fwy. ; remove R. [L.] hand ; $1 / 4$ turn R. [L.] ; turn back; replace hand.
3. Hang-ly. fwy.; remove R. [L.] hand; with $1 / 4$ turn R. [L.] place R. [L.] hand on floor in hang-rest-ly. pos. swy. Reverse movements to return hang-ly.
4. Ex. 3 but from hang-rest-ly. swy. change to rest-ly. pos. fwy. by removing L. [R.] with $1 / 4$ turn R. [L.] to place on floor. Jump to squat-std. and str. legs to std.
Ca. Free hand-hanging.
Side-stand under bar beyond reach; rise on toes, swinging arms forw.; bend knees, swinging arms bckw.; jump, swinging arms forw. up to grasp 2 hands upper grip [lower or mixed] ; arms straight [bent], feet together, ankles straight, chest arched, head erect.

## Exercises.

Arms. $\left\{\begin{array}{l}\text { I. }\end{array}\right.$ Change grip. $\left\{\begin{array}{l}\text { wide. } \\ \text { narrow. }\end{array}\right\} \begin{array}{l}\text { alt. } \\ \text { 2. }\end{array}$ Bend. $\left\{\begin{array}{l}\text { upper. } \\ \text { une } \\ \text { both } .\end{array}\right.$
Trunk. $\left\{\begin{array}{l}\text { 3. Turn. }\end{array}\right.$ \{ $\begin{array}{l}\mathrm{R} . \\ \mathrm{L} .\end{array}$
4. Raise. $\left\{\begin{array}{l}\text { forw. } \\ \mathrm{R} \text { to } \mathrm{r} \text { (L to } \mathrm{l}) . \\ \mathrm{R} \text { to } 1 \text { (L to }) . \\ \text { bckw. }\end{array}\right\} \begin{aligned} & \text { one. } \\ & \text { both. } \\ & \text { combinations. }\end{aligned}$

Legs. \{ 5. Raise knee forw. $\left\{\begin{array}{l}\text { one. } \\ \text { both. }\end{array}\right.$
6. Raise heel bckw. $\left\{\begin{array}{l}\text { one. } \\ \text { both. }\end{array}\right.$
7. Raise knee forw., str, leg. $\left\{\begin{array}{l}\text { one. } \\ \text { both. }\end{array}\right.$

Note.-Exercises I-7 may be taken with the jump to position, in position, or while swinging (see below) at end of forw. or of bckw. swing.
8. Raise knees forw., str. and swing bckw.
9. Raise legs forw., str. and swing bckw.
ro. Bend arms and raise knees forw, str. and swing bckw.
ir. Bend arms and raise legs forw., str. and swing bckw.
Swinging.
12. Raise knees forw.. and tilt body bckw., str. and swing bckw.
13. Raise legs forw., and tilt body bckw., str. and swing bckw.
14. Bend arms with (12).
15. Bend arms with (13).

Note,-Renew grip at end of each bckw. swing. Dismount at end of bckw. swing, pushing against bar.
$\dot{\text { Vaults. }}\left\{\begin{array}{ll}\text { 16. } & \text { Flank. } \\ \text { 17. } & \text { Squat. } \\ \text { 18. } & \text { Straddle. }\end{array}\right\}$ With two bars, both hands on
Note--Take these vaults to seat or std. on lower bar first, then over bar, forw. and bckw. to std. on floor.

Cb. Upper-arm hanging.
Side-stand fwy. close to bar, about shoulderhigh ; jump to position, both upper arms over bar.

Exercises-As in Ca.
$4,5,6,7,8$.
Cc. Hand-upper-arm hanging.

Side-stand fwy. close to bar, about shoulderhigh ; jump to position, R. [L.] upper arm over bar, L. [R.] hand upper grip.
Exercises-As in Ca . $4,5,6,7,8$.
D. Hand-knee hanging.

Cross-Stand under bar, shoulder-high, or higher; grasp 2 hands; jump and swing legs forw. above bar; drop one knee over bar.

Or: Side-stand fwy., bar shoulder-high or higher ; grasp 2 hands upper grip; jump, strl. L. [R.] leg 1. [r.] forw., catch knee on bar; or, raise knee forw., squat through, catch knee on bar.

Exercises-As in Ca.
I, $2,3,4,5,6,7$, and change legs.
Ea. Rest-standing frontways.
Side-stand fwy. arm's length from bar. shoulder-high: grasp 2 hands upper [lower] grip; lay out L. [R.] bckw.; close R. [L.] to L. [R.] ; arms str., head erect, chest arched.

Exercises-As in Аа.
I, 2, 3, 4, 6 (add bckw., omit forw.) , 7, 8 .
Eb. Rest-standing sideways.
Cross-stand swy. arm's length from bar, shoulder-high or lower ; grasp L. [R.] hand upper grip; lay out R. [L.] sdw.; close L. [R.] to R. [L.]; L. [R.] arm str.

Exercises-As in Aa.
I, 2, 3, 5, 6 (add bckw.) , 7, 8.

Ec. Rest-standing rearways.
Side-stand rwy. arm's length from bar, hiphigh; grasp bckw. 2 hands upper grip; lay out L. [R.] forw. ; close R. [L.] to L. [R.] ; arms str.

Exercises-As in Aa.
4, 6 (add bckw.. omit forw.) , 7, 8.
Fa. Rest-lying frontways.
Side-stand fwy. arm's length from bar, kneehigh or lower; bend knees and grasp 2 hands upper grip; lay out L. [R.] bckw. ; close R. [L.] to L. [R.] ; arms str.

Exercises-As in Aa.
I, 2, 3, 4, 6 (add bckw., omit forw. and R. to 1. [L. to r.] ), 7,8 .

Fb. Rest-lying sideways.
Cross-stand swy. arm's length from bar, knee-high or lower; bend knees and grasp L. [R.] upper grip; lay out R. [L.] sdw.; close L. [R.] to R. [L.] ; L. [R.] arm str.
Exercises-As in Aa.
1, 2, 3, 6 (add bckw., omit R. to 1. [L. to r.]).
Fc. Rest-lying rearways.
Side-stand rwy. arm's length from bar, kneehigh or lower ; bend knees and grasp bckw. 2 hands upper grip; lay out L. [R.] forw.; close R. [L.] to L. [R.] ; arms str.

Exercises-As in Aa.
I, $2,4,6,7$.
Ga. Rest frontways.
Side-stand fwy., bar shoulder-high or lower ; grasp 2 hands upper grip; jump to rest on bar; arms str., feet together, ankles str., chest arched.

Exercises.
I. Change grip to : wide.
2. Raise legs. $\left\{\begin{array}{l}\mathrm{R} \text { to } \mathrm{r} \text {. [L. to } 1 .] \\ \mathrm{R} \text { to } 1 .[\mathrm{L} \text { to r.] } \\ \text { bckw. }\end{array}\right\}$ one.
3. Straddle. $\left\{\begin{array}{l}\text { R. to r. [L. to 1] to place on bar. } \\ \text { R. to r. [L. to l.] form. over bar. } \\ \text { R. to r. [L. to 1.] norw. over bar, raising hand. } \\ \text { R. to 1. [L. to r.] to touch bar. } \\ \text { R. to 1. [L. to r.] form. over bar, raising hand. }\end{array}\right.$

Note. -The resting position may be taken from a std. or from a run. The exercises (except (i) ) may be taken at first with the jump to position, later from resting position.

Gb. Rest sideways-Possible but hardly useful on the bar.

Gi. Rest rearways-belongs to advanced work.
H. Hang-resting.

One hand rests on bar (hip-high or higher) ; the other grasps above on another bar, or the hand of an assisting gymnast or the upright.

Exercises.
I. Straddle. $\left\{\begin{array}{l}\text { R. to } r \text {. [L. to 1.]. } \\ \text { R. to } r \text {. }[\mathrm{L}, \text { to } .] \text { and form. } \\ \text { R. to } 1 .[\mathrm{L} . \text { to r.]. } \\ \text { R. to } 1 .[\mathrm{L} . \text { to r.] and form. }\end{array}\right.$
2. Vaults.
\(\left.\begin{array}{l}Flank <br>
-Front <br>
Rear <br>

Squat\end{array}\right\}\)| to |
| :--- |
| seat |
| stand. |

I. Standing.

Feasible only as an intermediate position in preparatory exercises for squat and strl. and squat straddle vaults.
X. Exercises involving a change from one position to another.

1. Jump to rest; strl. L. [R.] 1. [r.] and forw. over bar, raising L. [R.] hand; shift L. [R.] knee to catch bar and fall back to knee-hand hanging; recover rest by swinging $R$. [L.] leg and body forw. and bckw.
2. Jump to rest ; strl. L. [R.] 1. [r.] and forw. over bar, raising L. [R.] hand; swing R. [L.] leg forw. and bckw. (to acquire momentum) ; shifting L. [R.] knee to catch bar, at end of bckw. swing of leg, fall bckw. and circle bar bekw.
3. Jump to rest; strl. L. [R.] 1. [r.] and forw. over bar, raising L. [R.] hand ; change to under grip ; catch knee on bar: circle bar forw.; recover rest by swinging R. [L.] leg.
4. Jump to rest ; turn over forw. to std.
a. Bending knee and hips.
b. Bending hips only.
c. Body and legs str.
5. From a std. grasp bar 2 hands upper grip; half turn over bckw., touching feet to bar on far side.
6. Same touching thighs to bar.
7. Jump to rest; strl. L. [R.] 1. [r.] and forw. over bar, raising L. [R.] hand; shift L. [R.] knee to catch bar and fall back to knee-hand hanging; squat, leg R. [L.] str., and raise over to catch bar in R. [L.] groin; circle bar bckw. ; push up to rest.
8. From a std. circle bar bckw. to a rest.
9. Same as 8 but to side std. fiwy.
10. Vaults. (1) Flank, (2) Front, (3) Rear, (4) Squat, (5) Straddle, (6) Squat-straddle.
Note.-For preparatory exercises see same vaults under Side Horse. In front vault take upper grip with hand on side to which vault is made, under grip with other hand.

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## STATIONARY POLES.

Note.-Immovable app. with divided suspension or supporting surface.
A. Hang-standing.
B. Hang-lying.

Ca. Free hand-hanging.
E. Rest-standing.
F. Rest-lying.
G. Resting.
H. Hanging-resting.
J. Turning exercises-See Rings.
K. Climbing exercises.
(i. Resting.

Side-std. rwy.; grasp bckw. 2 hands, arms. bent, inside and back upper arms against poles : jump to rest on arms.
Exercises.

1. Raise legs. $\left\{\begin{array}{l}\text { forw. } \\ \text { L. to } 1[R . \text { to r r } \\ \text { L. or } \\ \text { bckw. }\end{array}\right\}$ one. to l] $\left.]\right\}$ both.
2. Raise kuees forw. $\left\{\begin{array}{l}\text { one. } \\ \text { both. }\end{array}\right.$
3. Raise heels bckw. $\left\{\begin{array}{l}\text { one. } \\ \text { both. }\end{array}\right.$

Note.-Resting may also be taken on one pole one hand waist-lighl, arm bent, other hand lower arm straight.
H. Hang-resting (on one pole).

Grasp L. [R.] hand low, R. [L.] hand high. both arms str.; jump to hang-resting swy.. resting on L. [R.] arm, hanging from R. [L.].
Exercises-As in G .
K. Climbing exercises (one pole). Grasp pole with one hand.
I. Place outside edge of foot on one side of pole, inside of knee on other side.
2. R. [L.] leg in position (as above), grasp 2 hands head high, jump and bend arms; str. arms and jump to stand.
3. Hanging as in (2) arms bent, change feet.
4. Hanging as in (3) place L. [R.] foot in front of R. [L.], toe pointing out, the pole held firmly between the legs.
5. Jump to straight arm hang, place feet, change feet.
6. Jump to straight arm hang, place feet, raise and lower knees.
7. Jump to bent arm hang, place feet, raise and lower knees.
8. Jump to bent arm hang, place feet, move one hand up.
9. Jump to bent arm hang, place feet, move hands alt. up and down.
10. Jump to bent arm hang, raise knees, str. knees and hips, and move hands up one after the other.
II. Jump to bent arm hang, place feet, move hands up together.
12. Climb by repeating No. Io, moving the hands up alternately, hands following one another.
13. As 12, but hand over hand.
14. As 12, but both hands move up together.

The descent for $2,3,14$ is taken by moving hands down in the same fashion, at the same time bendinghips and knees, then str. hips and knees, and straightening arms and continuing this exercise.

## TRAPEZE.

Note.-Movable apparatus, with undivided suspension or supporting surface.
A. Hang-standing.
B. Hang-lying,
C. Free-hanging,
D. Hand-knee hanging,
F. Rest-lying.
G. Resting, , These exercises on the Trapeze come H. Hang-resting, $/$ at a more advanced stage of work.

1. Standing, \} See same positions on Rings, and select
L. Swinging, $\}$ such exercises as are feasible.

## FLYING RINGS.

Note.-Movable apparatus, with divided suspension or supporting surface.
A. Hang-standing,
B. Hang-lying,
C. Free-hanging,
F. Rest-lying,

See same position on Horizontal
F. Reasible.
$\left.\begin{array}{ll}\text { G. Resting } \\ \text { H. Hang - resting, }\end{array}\right\}$ Belong to more advanced work.
I. Standing.
J. Turning exercises.
L. Swinging exercises.
I. Standing.

Stand in rings, steadied by grasping ropes shoulder-high.
Exercises.
I. Str. and bend arms; swinging body bekw. and forw.
2. - Bend knees and str. arms; bend arms and str. knees.
3. Bend knees and str. arms; str. knees; bend arms.
4. Rings swinging, str. arms at beginning of forw. swing : bend arms at beginning of bckw. swing.
5. Str. arms and bend knees beginning of forw. swing; bend arms and str. knees beginning of bckw. swing.
6. Str. arms and bend knees at beginning of forw. swing; in middle of forw. swing str. knees; at end of forw. swing bend arms.
7. Str. arms sdw. $\left\{\begin{array}{l}\text { one; one following the other. } \\ \text { both at one time }\end{array}\right.$
8. Strl. legs sdw. $\left\{\begin{array}{l}\text { one. } \\ \text { both. }\end{array}\right.$
J. Turning Exercises.

Note.-Rings at first low enough to grasp with bent arms. Gradually raise them.

1. Half turn-over bckw. raising knees forw.
2. Half turn-over bckw., touching toes to rings.
3. Half turn-over bckw., str. legs, feet touching ropes.
4. Half turn-over bckw., str. legs, free.
5. Half turn-over bckw., catch feet in rings and continue the turn by over-extending hips to hand-ankle hang rwy.
6. Complete turn-over bckw.
a. Bending hips and knees.
b. Bending hips only.
c. Str. hips and knees.
7. Ex. 5 ; then str. I leg bckw.
8. Ex. 5; then remove R. [L.] hand; turn L. [R.] about and grasp again in hand-ankle hang fwy.
9. Ex. 5 ; then remove R. [L.] hand and E. [R.] foot; turn L. [R.] about and grasp again in hand-ankle hang fwy.
Io. Side-stand rwy.; grasp bckw. upper grip; half turn over forw., raising knees forw.
ii. As io, and leg exercise as in 2.
10. As IO, and leg exercise as in 3 .
11. As 10, and leg exercise as in 4.
12. Complete turn-over forw. $\left\{\begin{array}{l}a, b, c, \\ \text { as in } 6 .\end{array}\right.$
L. Swinging Exercises.

Note.-Rings low enough to grasp without jumping.
I. Run 3 steps; jump to str.-arm hang, raising knees forw.
2. Run 3 steps; jump to str-arm hang, raising heels bckw.
3. Run 3 steps; jump to str.-arm hang, raising legs forw.
4. Run 3 steps; jump to str.-arm hang, strl. forw. 2 legs sdw.; close and strl.-legs sdw. at extreme of forw. and of bckw. swings.
5. Run 3 steps; jump to str.-arm hang; raise and lower knees at extreme of forw. and bckw. swings.
6. Run 3 steps; jump to str.-arm hang; raise and lower knees at extreme of forw. and bckw. swings.
Note.-The preceding exercises may also be taken in the bent arm hang.
7. Run 3 steps sdw. ; jump to bent arm hang; off at extreme R. [L.].
8. Run 3 steps bckw. ; jump to bent arm hang.
9. Run 3 steps forw. ; jump to bent arm hang; str. arms and raise knees, beginning of bckw. swing ; also raise heels bckw.
10. Grasp one ring with 2 hands; run and jump from L. [R.] foot, turning L. [R.] about; run and jump from R. [L.], turning R. [L.] about.
íi. Grasp two rings; take No. Io.
12. Grasp one ring 2 hands; run and jump from 2 feet, turning L. [R.] about, swing and push off with 2 feet turning R. [L.] about.

## SWINGING POLES.

Note.-Movable apparatus, with divided suspension or supporting surface.
A. Hang--standing.
B. Hang-lying.
C. Free hand-hanging.
G. Resting.
H. Hang-resting.
J. Turning Exercises.
K. Climbing Exercises.
$\left\{\begin{array}{l}\begin{array}{l}\text { See same position on Hori- } \\ \text { zontal Bar and select such } \\ \text { exercises as are feasible. }\end{array} \\ \text { See Stationary Poles. }\end{array}\right.$
L. Swinging Exercises.
L. Swinging Exercises. Grasp shoulder-high unless otherwise stated.

Note.-Swinging exercises I-6 under Flying Rings. May also be taken on the poles.

1. Grasp waist-high, run 3 steps, sliding hands up; jump to bent arm hang.
2. Run 3 steps; jump to bent arm hang; place feet in climbing pos. on R. [L.] pole. (See Stationary Poles K).
3. Run three steps; jump to bent arm, hang on one pole; place feet in climbing pos.
4. Ex. 3 ; str. and bend arms.
5. Ex. 2; change feet to other pole.
6. Ex. 2 ; change L. [R.] hand to R. [L.] pole.
7. Ex. 2; change feet to L. [R.] pole ; change R. [L.] hand to L. [R.] pole.
8. Ex. 2 ; change R. [L.] hand to L. [R.] pole.
9. Pole swinging toward gymnast; catch; run, jump to hang.
10. Drop one pole; as it starts back drop the other ; catch the first; run and jump to climbing pos. : on second swing forw. catch other pole with one hand.

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\begin{gathered}
1 \\
i n \\
\hline
\end{gathered}
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## HORIZONTAL LADDER.

Note.-Stationary apparatus with divided and undivided suspension and supporting surface. For free hand-hanging exercises see Horizontal Bar.
M. Traveling Exercises.

1. Side-hang on beam ; travel sdw. R. [L.].
2. Side-hang on beam; swing legs R. and L. from hips.
3. Side-hang on beam; travel sdw. R. [L.] swinging sdw.
4. Cross-hang on beams; travel forw. and bckw.
5. Cross-hang on beams; swing legs R. and L. from hips.
6. Cross-lang on beams, travel forw. and bckw., swinging sdw.
7. Side-hang on rounds; travel sdw. R. [L.].
8. Side-hang on rounds; swing legs R. and L. from hips.
9. Side-hang on rounds; travel sdw., R. [L.] swinging sdw.
10. Cross-hang on rounds; travel foriw. and bekw.
i1. Cross-hang on rounds; swing legs forw. and bckw. from hips.
11. Cross-hang on rounds; travel forw. and bekw., swinging forw. and bckw.
Note.-Hands may be moved. $\left\{\begin{array}{l}\text { alt. } \\ \text { one several times in suc- } \\ \text { cession. } \\ \text { together. }\end{array}\right.$
Arms may be $\left\{\begin{array}{l}\text { str. } \\ \text { bent. }\end{array}\right.$

> ordinary pos. knees raised forw. heels raised bckw. cross-straddled. side-straddled.
13. Cross-hang on beams; swing, and at end of forw. swing travel forw., both hands at once.
14. Cross-hang on beams; swing, and at end of bckw. swing travel bckw.. both hands at once.

## OBLIQUE LADDER.

K. Climbing Exercises.

Under side.
I. Feet on rounds, hands on beams, climb up and down ; move $R$. hand with $R$. foot.
2. Feet on rounds, hands on beams, climb up and down ; move R . hand with L . foot.
3. Feet on rounds, hands on beams, climb up and down ; move both hands with alt. feet.
4. Feet on rounds, hands on beams, climb up and down ; move both hands, then both feet.

Note-Ex. i-4 are also taken with hands on rounds. In this pos., i.e., hang std. fwy., take the following exercises:
a. Bend arms.
b. Bend arms alt. (hands on beams), swinging body from side to side.
c. Bend and str. knees without moving hands.
d. Bend and str. knees, moving hands down and up.
e. Bend and str. hips.
$f$. Bend and str. hips. moving hands down and up.
5. Hands on beams, climb up and down.
6. Hands, one on beam. one on round, climb up and down.
7. Hands on rounds, climb up and down.

Note-Ex. 5-7 are taken descending first, and later ascending.
Arms may be $\left\{\begin{array}{l}\text { str. } \\ \text { bent. }\end{array}\right.$
Hands may move $\left\{\begin{array}{l}\text { alt. } \\ \text { one several times in succession. } \\ \text { together. }\end{array}\right.$
8. Slide down, hands and one foot on beams, moving hands alt. or together.
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9. Slide down, hands and both feet on beams, moving hands alt. or together.
10. Hang-std. fwy. ; climb around beam to std. or rest ; std. on upper side.
11. Hang-std. fwy.; change to hang-ly. (head and shoulders between rounds), then to rest-ly. fwy. on upper side (head will now be down. weight resting on arms), descend.
12. Hang-std. fwy.; pass between rounds (feet first), to std. ly. rearways on upper side; descend.

## Upper side.

13. Feet on rounds, hands on beams; move R. hand with R . foot.
14. Feet on rounds, hands on beams: move $R$. hand with L . foot.
15. Feet on rounds, hands on beams; move both hands with alt. feet.
16. use only one hand.

Note.-Ex. I3-I6 are also taken with hands on rounds, and both ascending and descending.
17. Without using hands walk up forw.
18. Without using hands walk up sdw.
19. Rest-ly. fwy.; feet on beams, hands on rounds. travel.

Note.-Ex. i9 descending before ascending.
20. Rest-ly. fwy.; change quickly to sitting, and slide down bckw.
21. Std. on rounds, climb around beam to hangstd. on under side.
22. Std. on rounds, hands on beams; bend one knee, raising other leg forw. between rounds.
23. From std. change to seat, feet between rounds : then hang rwy. on under side.
24. From std. change to seat, feet between rounds ; then with $1 / 2$ turn L. [R.] ; change to hang fwy. on under side.
25. From std. change to hang-ly., passing head and shoulders between rounds; with $1 / 2$ turn forw. change to hang rwy. on under side.
26. Sitting pos. rwy., hands and feet on beams ; slide down forw.
27. Seat on one beam (side-saddle fashion) hands. free; slide down forw. and bckw.

## VERTICAL LADDER.

K. Climbing Exercises.
I. Hands and feet on rounds, climb up and down, move R. hand with R. foot.
2. Hands and feet on rounds; move R. hand with L. foot.
3. Hands and feet on rounds, move both hands at once and R. (L.) foot.
4. Hands and one foot on rounds; hop; move hands alt., one several times or together.
5. Hands and feet on rounds; hop; move hands alt., one several times or together.
6. Hands and feet on rounds; hop, skipping one round (or more).

Note.-These exercises (I-6) may also be taken with hands on beams and both assending and descending.
7. Ascend, hands on rounds: change to hang. fwy.; descend in this position; take exercises under Horizontal Bar, Aa, I, 2, 3, 5. 6 (omit forw.) , 8 ; change grip of one hand to lower grip: to grasp lower round ; give up grip of one hand altogether.
8. Hands on rounds, feet on beams, travel.

ノ 9. Hands, one on rounds, one on beam, feet on beams.
10. Hands on beams, feet on beams.

Note.-Exercises 7 - 10 are taken only descending at this stage of progress.
Hands move $\left\{\begin{array}{l}\text { alt. } \\ \text { one several times in succession. } \\ \text { together. }\end{array}\right.$

## SWINGING LADDER.

1. Jump to hang. pos. ; swing up and down ; bend knees and arms in landing; straighten arms and knees in rising.
2. While rising, raise knees forw.
3. While rising raise heels bckw.
4. While rising raise legs forw.
5. While rising raise legs bckw.
6. While rising strl. legs sidwd.
7. While rising strl. legs L. to (r.) R. to (1.).
8. While rising alt. 6 and 7 .
9. While rising twist trunk R. and L. alt. Note.-Ex. I-9 may be taken with arms str. or bent. Ex. 2-7 may be taken moving legs alt. or together.
10. Bend arms at end of upw. swing, bringing head above ladder.
iI. Change one hand from beam to round.
11. Change hands successively from beam to round and back.
12. Change both hands at once from beam to round.
13. Swing in upper-arm hang with exercises as in I-9.
14. Swing in seat on one beam.

## GIANT STRIDE.

Movable apparatus with undivided and divided suspension and supporting surface.

1. Side stand frontways, grasp one of the rounds with (a) upper, (b) under, (c) double grasp, follow step L. (r.).
2. Same as $I$, but gallop sidew. L. (R.).
3. Same as 1 , but walk sidew. $L$ ( $R$ ), passing $L$ (R.) foot in (a) front, (b) rear of R. (L.) foot.
4. Same as 3, but run sidew. L. (R.).
5. Cross stand sidewy. L. (R.), grasp upper round with L. (R.) hand, lower with R. (L.), both hands upper grasp or double grasp. Walk forw.
6. As 5 , but run forw.
7. As 5, but follow step L. (R.) forw.
8. As 7, but follow hop, L. (R.) forw. (gallop forw.).
9. As 5, but change step walk L. (R.) forw.
10. As 5 , but change step hop forw.

In exercises I -Io the gymnast should keep well away from the center of the apparatus, transfer the weight of the body more and more on the arms and lengthen steps gradually.
iI. Side stand (between two rope ladders), grasp upper round of rope ladders and follow step L. (R.).
12. As iI, but gallop L. (R.).

I3. As II, but walk L. (R.), passing L. (R.) foot in (a) front, (b) rear of R. (L.) foot.
14. As I3, but run sidew. L. (R.).
15. As 12, after acquiring sufficient momentum raise heels backw. and swing in free hand hang.
16. As 15, but raise knees forw.
17. As 15 , but raise legs sidew.
18. As i5, but raise L. leg forw., R. leg bckw.
19. Run sidew. L. (R.) and as 15-18.
20. Gallop or run, jump to bent arm-hang and as 15 -I8.
21. Cross stand, upper arm hang on same round of two of rope ladders. Walk forw.
22. As II, run forw.
23. As II, run forw. with leg raising forw. (knees straight), lengthen steps (giant stride).
24. As II, run forw. (in straight. line, away from center, in a tangent) three steps, with third step jump off and stay free flying for a moment, one leg raised forw., other bckw. (cross straddle position).
25. Start as 14, when sufficient momentum has been acquired close feet and keep up the circular swing by pushing off with both feet.
26. As 21 .
27. As 22.
28. As 23.
29. As 24.

But upper arm hang $L(R)$ on upper round of one rope ladder, hand hang $\mathrm{R}(\mathrm{L})$ on 30. As 25.

3I-35. As 2I-25, but hand hang, $L$. hand on upper R . hand on lower round.

## SIDE HORSE.

Note.-Straddle jumping is presupposed.

1. From a std. jump to momentary rest on pommels.
2. From a std. jump to rest on pommels.
3. Strl. jump and grasp pommels, knees bent; jump to rest.
4. One step or more before the strl. jump.
5. From a run jump to rest.
6. Jump to momentary rest, straddling $R$. to r. [L. to 1.].
7. Jump to momentary rest, straddling both legs sidwd.
8. Jump to momentary rest, swinging both legs to one side.
9. Jump to momentary rest, straddling one leg bckw.
10. Jump to momentary rest, swinging both legs bckw.
II. Jump to momentary rest, straddling R. to 1 . [L. to r.].
11. Jump to momentary rest, raising one knee forw.
12. Jump to momentary rest, raising both knees forw.
13. Jump to momentary rest, raising one heel bckw.
14. Jump to momentary rest, raising both heels bckw.
15. Jump to momentary rest, twisting trunk.
16. Jump to momentary rest, twisting trunk $R$. [L.] and raising R. [L.] leg forw.
17. Jump to momentary rest, twisting trunk R. [L.] and raising L. [R.] leg forw.
18. Jump to momentary rest, twisting trunk and raising both legs forw.
19. Jump to momentary rest, twisting trunk and raising one leg bckw.
20. Jump to momentary rest, twisting trunk and raising both legs bckw.

Note.-Ex. 6-2I are taken first from a std., then from a run.

## Straddle Mounts.

From a stand or run jump to rest fwy. and :
22. Strl. R. [L.] leg r. [1.] and place on horse.

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23. Strl. R. [L.] leg r. [1.] and place on horse; strl. forw. R. to 1. [L. to r.] over horse.
24. As 23 and continue last strl. over pommel to seat or rest cross strl.
25. As 22 ; raise R. [L.] hand and strl. R. [L.] leg forw. 1. [r.] over pommel to seat or rest cross strl.
26. As 25 but raising of hand and strl. occur together.
27. Strl. R. [L.] leg r. [1.] and forw. 1. |r.| over horse (not yet over pommel).
28. Strl. R. [L.] leg r. [1.] and forw., l. [r.] over pommel to seat or rest cross strl.
29, 30, $3 \mathrm{I}, 32,33,34,35$ as $22-28$ but strl. L. to r. [R. to 1.] forw.

Flank Vault.
With jump to rest from std. or run take the following. Ex. 22 and 29 above.
36. Swing both feet R. [L.] to place on horse ; i.e., rest lying sdw. L. [R.]
37. Swing both feet R. [L.] to place on horse; place R. [L.] hand on hip.
38. Ex. 37 ; then jump over forw.
39. Flank vault R. [L.] in one movement.

Front I'ault.
With jump to rest from std. or run take the following: Ex. 21.
40. Swing both legs R. [L.] and above horse with $1 / 4$ turn L. [R.] and strl. R. [1.] r. [1.] to crossseat side strl.

Note.-Unless otherwise stated a strl. rest or seat on the Side Horse is a side seat (or rest) cross-strl., i.e., the line of the shoulders parallel. to the length of the horses, the legs strl. one forw., the other bckw.

A cross-seat (or rest) side strl. is a pos. with the line of the shoulders across the length of the horse, and the legs strl. sdw.
41. Swing both legs R. [L.] above horse, with $1 / 4$ turn L. [R.] to rest-ly. fwy., R. [L.| leg on horse, L. [R.] pendant.
42. Swing both legs R. [L.] above horse, with $1 / 4$ turn L. [R.] to rest-ly. fwy., both legs on horse.
43. Swing both legs R. [L.] above horse, with $1 / 4$ .turn L. [R.] and strl. R. [L.] leg over horse. L. [R.] on horse.
44. Front vault R. [L.].

Rear Vault.
With jump to rest from std. or run take the following. Ex. I9 above.
45. With $1 / 4$ turn R. [L.] swing both legs forw. and strl. L. [R.] forward, 1. [r.] to crossseat, side strl. on croup [neck].

Note. - Face is turned away from pommels in these exercises.
46. With $1 / 4$ turn R. [L.] strl. L. [R.] forw. 1. [r.] to place on croup [neck], R. [L.] leg pendant, removing R . [L.] hand.
47. With $1 / 4$ turn R. [L.] swing both legs forw. L. [R.] to rest-ly. rwy.
48. With $1 / 4$ turn R. [L.] swing legs forw. and str1. L. [R.] leg forw. 1. [r.] over horse, R. [L.] leg on horse.
49. With $1 / 4$ turn R. [L.] swing legs forw. strl. L. [R.] forw. 1. [r.] to cross-seat, side strl. in saddle (i. e., rear vault into saddle).
50. Rear vault to seat on opposite side.
51. Rear vault to std.

Squatting Vault.
With jump to rest from std. or run take the following: Nos, i2 and I3 above.
52. Place one knee in saddle.

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53. Place both knees in saddle.
54. Place one foot in saddle.
55. Place one foot, the other knee in saddle.
56. Squat std. in saddle.
57. Squat through with both feet.
58. Squat through with one foot.
59. Squat through with one foot, knee std. with other.
60. Squat through with one foot, squat std. with other.
61. Squat vault (differs from 57 in that hands leave the pommels when body is above horse).

Straddle l'ault.
Review Ex. 7.
62. Jump to rest, raising hips bekw.
63. Jump to rest, raising hips bckw. and straddling both legs sidwd.
64. Jump to strl. std. on horse.
65. Straddle vault over horse.

Squat-straddle Vault.
66. Jump to rest, raising R. [L.| knee forw. and straddling L. [R.] leg l. [r.].
67. Jump to rest, placing R. [L.] knee in saddle and straddling L. [R.] leg 1. [r.], to place on neck [croup], i.e., squat-strl. std.
68. 'Squat-straddle vault.

## Diöing.

69. Jump to rest, body well over horse, fuickly place hands on shoulders of assistant.
70. Jump to rest on shoulders of assistant, thighs only touching horse.
71. Dive over horse without touching it, hands on shoulders of assistant. his hands under arms of gymnast.

Straddlings in intermediate rest.
Jump to rest, straddling R. [L.] leg r. [1.] and forw. to strl. rest in saddle; take the following exercises:
72. Strl. L. [R.] 1. [r.] and forw. to stand or rest rearw.
73. Strl. L. [R.] 1. [r.] and forw. and dismount with $1 / 4$ turn R. [L.].
74. Strl. L. [R.] 1. [r.] and forw. and dismount with $1 / 2$ turn R. [L.].
75. Strl. L. [R.] 1. [r.] and forw. with $1 / 2$ turn R. [L.] to rest on croup [neck].
76. Ex. 75 ; then strl. L. [R.] 1. [r.] with $1 / 4$ turn R. [L.] to cross seat, side-strl. on croup [neck].
77. Ex. 76, in one movement, pivoting on R. [L.] hand.
78. Strl. L. [R.] r. [1.] and forw. to rest or std. rwy.
79. Strl. R. [L.] r. [1.] to place on horse ; remove R. [L.] hand and strl. R. backw. to rest or std. fwy..
80. Ex. 79 in one movement.

8I. Strl. R. [L.] 1. [r.] and bekw. to rest or std. fwy.

Straddling Mounts from rest rwy.
82. Side std. fwy.; grasp L. [R.] pommel with R.' [L.] hand (thumb in) ; with $1 / 2$ turn L. [R.] jump to rest rwy.
83. From rest rwy. strl. R. [L.] r. [1.] to place on horse ; remove R. [L.] hand and strl. R. [L.] bckw. to strl. rest or seat.
84. Ex. 83 in one movement.
85. From rest rwy. strl. R. [L.] 1. [r.] bckw. to strl. rest or seat.

## HORSE OR BUCK.

## Put up Lengthzise (Without Pommels.)

1. Jump to rest.
2. Jump to rest, straddling legs swd. Note.-See Side Horse. Ex. 6-2I.
3. Jump to strl. seat.

Note.-On the Long Horse, unless otherwise stated strl. seat indicates cross-seat, side-strl.

Ifercises from Str. Seat.
4. Strl. R. [L.] forw. 1. [r.] and dismount.
5. Strl. R. [L.] forw. 1. [r.] and dismount with $1 / 4$ turn R. [L.] (same with $1 / 2$ turn R. [L.]).
6. Strl. R. [L.] forw. 1. [r.] $1 / 4$ turn R. [L.] to rest fwy.
7. Strl. R. [L.] bckw. to rest-ly. fwy.
8. Strl. R. [L.] bckw. 1. [r.] to seat (side-saddle fashion).
9. Ex. 8 with a preparatory bckw. swing of body for impetus.
10. Ex. 9; then strl. R. [L.] forw. and r. [1.] to strl. seat.
ii. Ex. io in one movement.
12. Strl. R. [L.] bckw. to rest-ly.; stŕl. L. [R.] bckw. ; strl. both sdw. to strl. seat; swing both legs bckw. and sdw. R. [L.] to std. swy.
13. Swing both legs bckw. to rest-ly. fwy.: dismount by swinging both legs to R. [L.].
14. Swing both legs bckw. and R. [L.], to std. swy.
15. Ex. 14 with $1 / 4$ turn to L . [R.] in dismount.

I6. Ex. I4 with $1 / 2$ turn to L. [R.] in dismount. Note.-Ex. 12, 14, 16, are front-vault dismounts.
17. Strl. R. [L.] bckw. and 1. [r.] forw. to seat (side saddle position) ; dismount.
18. Strl. R. [L:] bckw. and dismount to std. swy.
19. As 18 but dismount with $1 / 4$ turn R. [L.] to std. fwy.
20. As 18 but dismount with $1 / 2$ turn R. [L.] to std. swy.
21. Strl. R. [L.] bckw. 1. [r.] forw. to seat; with $1 / 4$ turn R. [L.] to rest fwy. jump bckw. to std. fwy.
22. Strl. R. [L.] bekw. and 1. [r.] with $1 / 4$ turn to rest fwy. off as in 21.
23. Strl. R. [L.] bekw. 1. [r.] with $1 / 4$ turn R. [L.] to rest fwy.; strl. L. [R.] 1. [r.] forw. with $1 / 4$ turn R. [L.] to cross-seat side-strl. ; swing both legs bckw.; jump off bckw. to std. fwy.
24. Jump to seat on L. [R.] side of app.; strl. R [L.] bekw.; place leg on app.; swing L. [R.] leg bckw. and dismount to R. [L.].
25. Seat as above; strl. R. [L.] bckw. r. [1.] forw.
to strl. seat ; swing both legs bckw. and dismount bckw.
26. Strl. seat; strl. R. [L.] forw. 1. [r.] to seat on side ; bckw. r. [1.] to strl. seat as before.
27. As 26 but strl. in one movement.

NpTE.-In strl. seat $1 / 4$ turn R. [L.] to sideseat, cross-strl. and take Ex. 72-77 under Side Horse.

Straddle Vault (Buck only).
28. Jump to strl. seat; swing legs bckw. to restly.; jump off bckw.
29. Jump to strl. seat ; jump off forw.
30. Movements of Ex. 29 in quick succession.

3I. Jump to rest-ly. fwy.; jump off forw. straddling sdw.
32. Straddle vault (i.e., strl, over buck, hands only touching).

## Flank Vault.

33. With $1 / 4$ turn R. [L.] jump to side-rest fwy. (on the side of apparatus).
34. From pos. of Ex. 33 strl. L. [R.] 1. [r.] to place on horse.
35. With $1 / 4$ turn R. [L.] jump to side-rest fwy. straddling L. [R.] leg 1. [r.] to place on horse.
36. As 35, swing R. [L.] leg 1. [r.] dismount forw. to stand rwy.
37. With $1 / 4$ turn R. [L.] jump to side-rest fwy., swinging both legs L. [R.] to rest-ly. swy.
38. Flank vault over horse to std. rwy.

## Front Vault.

39. With $1 / 2$ turn R. [L.] jump to cross-rest swy. (resting on L. [R.] hand with L. [R.] thigh against side of horse).
4o. With $1 / 2$ turn R. [L.] jump to cross-rest swy., straddling L. [R.] leg bckw. to rest on horse, swing R. [L.] leg bckw. and dismount sdw. L. [R.].
40. Same straddling L. [R.] bckw. 1. [r.] over horse to strl. seat.
41. Same swinging both legs bckw. to rest-ly, fwy.
42. Same straddling L. [R.] bckw. 1. [r] over horse and R. [L.] bckw. to place on horse.
43. Front vault over horse to std. swy.

Rear Vault.
45. Jump to cross-rest swy.
46. Same straddling R. [L.] leg forw. to place on horse.
47. Same straddling R. [L.] leg r. [1] to strl. seat.
48. Same swinging both legs forw. to place on horse.
49. Same straddling R. [L.] over horse, L. [R.] on horse.
50. Same swinging botlı legs forw. over horse to seat on opposite side.
51. Rear vault over horse to std. swy.

## Fencer's l'aults.

From L. [R.] side of end of apparatus, R. [L.] hand only touching.

Rear Fencer's V'ault, from a stand or run.
52. Jump from L.. [R.] foot, straddling R. [L.] forw to place on horse.
53. Jump from L. [R.] foot, straddling R. [L.] forw. r. [1.] to strl. seat.
54. Jump from L. [R.] foot, swinging both legs to place on horse.
55. Jump from L. [R.] foot, straddling R. [L.] over, L. [R.] on horse.
56. Jump from L. [R.] foot, swinging both legs over to seat on opposite side.
57. Rear vault from L. [R.] foot to std. swy.

Flank Fencer's I'ault.
58. Jump from L. [R.] foot with $1 / 4$ turn R. [L.] strl. L. [R.] 1. [r.] to place on horse.
59. Jump from L. [R.] foot with $1 / 4$ turn R. [L.], swinging both legs 1 . [r.] to rest-ly. swy.
60. Flank vault from L. [R.] foot to std. rwy.

Front Fencer's l'ault.
6I. Jump from L. [R.] foot with $1 / 2$ turn R. [L.] strl. L. [R.] bckw. to place on horse in rest-ly. fwy.
62. Same straddling L. [R.] 1. [r.] to strl. seat.
63. Same swinging both legs to rest-ly. fwy.
64. Same straddling, L. [R.] over, R. [L.] on horse.
65. Front vault from L. [R.] foot to std. swy.

Straddle Turn (Scissor) Exercises:
On Horse placed lengthwise, with pommels, strl. seat on croup or neck, rest weight forw. on arms. Review Ex. 7, ir, i2.
66. Swing legs bckw., closing above horse.
67. Swing legs bckw., to rest-ly. fwy.; cross L. [R.] over R. [L.] : $1 / 2$ turn L. [R.] to strl. seat. 68. No 67 free.

Rest weight bckre. on arms.
69. Swing legs forw., closing above horse.
70. Swing legs forw. to rest-ly: rwy.; cross L. [R.] over R. [L.] ; $1 / 2$ turn R. [L.] to strl. seat. 71. No. 70 free'.

## PARALLEL BARS.

Note.-Hang-std., hang-ly., and rest-std. may be taken on the Parallels as on the Horizontal Bar; and either in a side or cross position.

Hand-knee hanging.
From cross-stand frey. (i.e., facing end parallels).
r.. Hands on bars, jump with $1 / 4$ turn over bekw. straddling both legs sdw. to catch knees on bars.
2. Same, swinging both legs R. [L.] over- one bar.
3. Same; straddling L. [R.] leg only 1. [r.] over one bar.
4. Same straddling L. [R.] leg only r. [1.] over R. [L.] bar.

From side-std. froy. (i.e.. facing side of apparatuis.)
5. Hands on near bar, jump with $\mathrm{T} / 4$ turn over bckw. and brace feet against far bar (i.e., hang --std. fwy.).
6. Jump to hang-std. fwy.; str. one leg over and under bar.
7. Jump to hang-std. fwy.; change to kneehand hang.
8. Jump to hang-std. fwy. one foot, other leg above or below bar.
9. . Jump to hand-knee hang.
10. * Jump to hand-knee hang, bend arms.
i I. Jump to hand-knee hang, remove one hand.
12. Jump to hand-knee hang, twist trunk.
13. Jump to hand-knee hang, remove one hand. twist trunk.
14. Jump to hand-one knee hang.
15. Jump to hand-one knee hang, change hands to far bar (alt., together).
16. Jump to hand-knee hang; squat through with one foot.
17. Jump to hand-knee hang: squat through with both feet and turn over bckw. to std. fwy.

## Turning-cross-st. between bars.

18. Bend body forw. : grasp bckw. to hang-std. rwy.; turn over forw.
19. Turn over bckw. to hand-ankle hang rwy.

2o. Turn over bckw. to hand-ankle hang rwy. strl. one leg forw.
21. Turn over bckw. to hand-ankle hang; turn over forw. to std.
22. Turn over bckw. to hand-ankle hang ; change to hang-std. by bracing feet against uprights.
23. Complete turn-over bckw. to std.

Upper-Arm Hang.
24. Jump to upper-arm hang: swing legs forw. and bckw.
25. Upper-arm hang, strl. legs forw. sdw. to hang -ly. rwy.
26. Upper-arm hang; swing legs forw. and to R. [L. $]$ over one bar; push up to seat on that bar.
27. Upper-arm hang; strl. legs forw. sdw. to hang-ly. rwy.; push up to strl. seat.
28. Upper-arm hang; strl. legs bckw. sdw. to hand-ankle hang fwy.
29. Upper-arm hang; strl. legs bckw. sdw. to hand-ankle hang fwy.; push up to rest-ly. fwy.

Resting Exercise.
Cross-std. fwy. outside of bars.
30. Jump to rest.
31. Jump to rest, strl. legs (one or both) sdw.
32. Jump to rest, strl. legs (one or both) sdw. L. to r [R. to l.].
33. Jump to rest, strl. one leg forw.
34. Jump to rest, swing both legs forw.
35. Jump to rest, strl. one leg bckw.
36. Jump to rest, swing both legs bckw.
37. Jump to rest, raise knees forw., one, both.
38. Jump to rest, raise heels bckw., one, both.

Note.-Take Ex. 30-38 also with the jump to pos.
39. Jump to rest, straddling R. [E.] leg forw. r. [1.] over bar.
40. Jump to rest, straddling both legs forw. sdw. to strl. seat.
41. Jump to rest, swinging both legs forw. R. [L.] to seat on one bar.
42. Jump to rest, swinging both legs to seat on one bar, then over to seat on the other.
43. Jump to rest, straddling R. [L.] leg forw. 1. [r.] over bar.
44. Jump to rest, straddling R. [L.] leg forw. r. [1.] bckw. 1. [r.], cutting off R. [L.] hand.
45. Jump to rest, straddling R. [L.] leg r. [1.] forw. 1. [r.] bckw., cutting off R. [L.] hand.
46. Jump to rest, straddling R. [L.] leg forw. 1. [r.] bckw. r. [1.], cutting off L. [R.] hand.
47. Jump to rest, straddling R. [L.] leg 1. [r.| forw. r. [1.] bckw ..cutting off L. [R.] hand.
48. Jump to rest : strl. R. [L.] forw. 1. [r.] over bar; strl. L. [R.] r. [1.] forw., with $1 / 4$ turn R. [L.] to rest-ly. fwy.
49. Rest-ly. fwy. (as before) ; strl. L. [R.] 1. [r.] with $1 / 4$ turn R. [L.] to strl. seat.
50. Jump to rest; strl. R. [L.] forw. 1. [r.] over bar; in one movement strl. L. [R.] 1. [r.] forw., with $1 / 2$ turn R. [L.] to strl. seat.
51. Strl. seat as in $50 ; 1 / 4$ turn R. [L.] to side-seat, cross-strl. ; change R. [L.] hand to under grip, strl. L. [R.] 1. [r.] forw. and dismount, with $1 / 4$ turn R.
52. Ex. 51, with $1 / 2$ turn in dismount.
53. Ex. 52 to rest-fwy., instead of a dismount.
54. Side-seat cross-strl. as in 50 ; place R. [L.] hand on rear bar; strl. L. [R.] leg 1. [r.] forw., with $3 / 4$ turn R. [L.] to strl. seat.
55. Jump to rest, swinging from hips.

Note.-At end of forw. or of bckw. swings or both, take following exercises:
Leg raising forw. and bckw.
Leg straddling sdw. R. to 1. [L. to r.]
Knee raising forw.
Heel raising bckw.
one.
both.
56. End of forw. swing strl. R. [L.] forw. r. [1.] to seat.
57. End of forw. swing, swing both legs forw. R. [L.] to seat.
58. End of forw. swing strl. both legs forw. sdw. to strl. seat.

Cross-std. betzueen bars-jump to rest, swinging.
59. End of bckw. swing strl. both legs bckw. sdw. to strl. seat.
60. End of bckw. swing strl. one leg bckw. to seat.
61. End of bckw. swing, swing both legs bckw. R. [L.] to seat, place hands back, swing legs forw. L. [R.] to seat.
$\$$
62. End of forward swing, swing both legs R. [L.] in rear vault dismount.
63. End of bckw. swing, swing both legs R. [L.] in front vault dismount.
04. End of forw. swing $1 / 4$ turn R. [L.] and dismount in flank vault forw. or bckw.
65. End of bckw. swing $1 / 4$ turn R. [L.] and dismount in flank vault forw. or bckw.
66. End of forw. swing-rear vault dismount $R$. [L.] with $1 / 4$ turn L. [R.].
67. End of forw. swing-rear vault dismount R. [L.], with $1 / 2$ turn L. [R.].
68. End of bckw. swing-front vault dismount R. [L.], with $1 / 4$ turn L. [R.].
69. End of bckw. swing-front vault. dismount R. [L.], with $\mathrm{I} / 2$ turn L. [R.].

Straddle Turn (Scissor) Exercise.
70. End of bckw. swing come to rest-ly. twy.
71. End of bckw. swing strl. both legs sdw. free.
72. End of bckw. swing strl. both legs L. to r. [R. to 1.] free.
73. Jump to rest ; turn trunk R. [L.].
74. End of bckw. swing turn trunk R. [L.].
75. End of bckw. swing strl. L. [R.] leg r. [1.] in front of R. [L.] and over bar to seat.
76. End of bckw. swing strl. R. [L.] leg 1. [r.] behind L. [R.] and over bar to seat.
77. Combine 76 and 77 , with $1 / 2$ turn R. [L.] to strl. seat, grasping bars in rear of body.

Tilt $u p$.
78. Swing up to seat on one bar; fall back to ly.: rise to seat.
79. Swing up to strl. seat ; fall back to ly. ; rise to seat.
8o. Swing up to seat on one bar; fall back to ly.; raise legs forw. ; lower legs and tilt up to seat.

8i. Swing up to strl. seat; fall back to ly.; raise legs forw. ; lower legs and tilt up to seat.
82. Swing up to seat on one bar; fall back and raise legs; lower legs and tilt up.
83. Swing up to strl. seat; fall back and rase legs; lower legs and tilt up.
84. From seat on one bar, fall back; tilt up to strl. seat.
85. From seat on one bar, fall back; tilt up to seat on other bar.
86. From strl. seat, fall back; tilt up to seat on one bar.

## Roll over.

87. Resting, raise body bckw. and bend head torw.
88. Strl. seat, bend body forw.
89. Strl. seat, rest on arms, raising body bckw. and leaning forw.
90. Ex. 89, bending arms.
91. Roll over forw., to knee-upper-arm hang.
92. Roll over forw., to seat.

Rest-ly. Exercises, from a side-st. fwy.
93. Jump to rest on near bar ; change hands to tar bar (i.e., side rest-ly. fwy.) ; strl. R. [L.] leg r. [1.] to place on bar.
94. Jump to side rest-ly.; strl. R. [L:] leg 1. [1.] forw. over near bar.
95. Jump to side rest-ly; strl. R. [L.] r. [1.] forw. 1. [r.] bckw., with a slight turn L. [R.].
96. Jump to side rest-ly.; strl. R. [L.] 1. [r.] forw. r. [1] with a slight turn L. [R.]; then 1. [r.] bckw. 1. [r.] with a slight turn L. [R.].
97. Jump to side rest-ly.; strl. R. [L.] 1. [r.] and forw. r. [1.] and bckw., with a slight turn L. [R.].
98. Jump to side rest-ly.; strl. R. [L.] leg 1. [r.| and forw. 1. [r.], with $1 / 4$ turn L. [R.] to seat on one bar.
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99. Jump to side rest-ly.; strl. R. \L.」 leg r. \1.〕 and forw., with $1 / 4$ turn L. [R.] ; then strl. R. [L.] forw. and r. [1.] to strl. seat.
100. Jump to side rest-ly.; strl. R. [L.] r. [1.] forw. over both bars to strl. seat.
101. Straddle seat; strl. L. [R.] bckw.. with $1 / 4$ turn L. [R.] to side rest-ly. fwy., changing R . hand to other bar.
102. R. [L.] hand under, L. [R.] hand upper grip; with $1 / 4$ turn R. [L.] jump to strl. seat; swing legs bckw. to cross rest-ly. fwy.
103. In cross rest-ly. pos., raise one leg bckw.
104. In cross rest-ly. pos., raise one arm forw.
105. In cross rest-ly. pos., advance, moving hancis alt.
106. In cross rest-ly. pos., jump with both hands.
107. In cross rest-ly. pos., advance, moving hands together.
108. In cross rest-ly pos., raise both feet quickly.
109. In cross rest - ly. pos., raise one foot, the other hand.

Flank V ault to side st. between bars.
IIO. Jump to momentary rest on near bar.
i iI. Jump to rest, straddling R. [L.] leg r. [1.].
I I2. Jump to rest, straddling L. [R.] r. [1.].
II3. Jump to rest, swinging both legs R. [L.].
ir4. Jump to rest, swinging both legs R. [L.] to place on bar.
115. Ex. 114 and grasp L. [R.] hand forw. to far bar, remove R. [L.] hand.
116. From momentary rest on near bar take flank vault to side-std. between bars, hands on far bar.
117. From momentary rest, L. [R.] hand on far bar, R. [L.] hand on near bar, take flank vault R. [L.] to side-std. between bars, hands on far bar.
118. From momentary rest-ly.. take flank vault to side, std. between bars.

Flank Vault over both bars.
II9. From rest, as in II7, flank vault over both bars to side-std. rwy.
120. From rest-ly., swing legs r. [1.] over both bars to side-std, rwy.
121. From momentary rest-ly., flank vault over both bars to side-std. rwy.
Front Vault to rest or std. between bars.
122. L. [R.] hand under grip, R. [L.] upper grıp. jump to momentary rest on near bar.
123. Same swinging legs R . [L.].
124. Same swinging legs $R$. [L.] and removing $R$. [L.] hand.
125. Same swinging legs R. [L.] to place on near bar, grasping R. [L.] hand forw. to far bar. with $1 / 4$ turn L. [R.].
126. Same, straddling R. [L.] leg over both bars to strl. seat.
127. Same, straddling R. [L.] leg to cross rest-ly. fwy.
128. Front vault to çross-std. or rest between bars.

Rear Vault, to std. or rest between bars.
129. Jump to rest on near bar, swinging legs forw. with $1 / 4$ turn R. [L.].
130. Jump to rest, swinging legs forw. with $1 / 4$ turn R. [L.] to seat on near bar, transferring L. [R.] hand to far bar.
13I. Same moving R. [L.] hand quickly behind body.
132. Jump to rest with $1 / 4$ turn, R. [L.] straddling L. [R.] forw. 1. [r.] over both bars to strl. seat transferring L. [R.] hand to far bar, R. [L.] behind body.
133. Same swinging both legs to seat on far bar.
134. Rear vault to cross std. or rest between bars.

Note.-Stationary and Swinging Poles, Horizontal Bar and Rings offer divided and undivided supporting and suspension surfaces, dependent on whether one or two poles, etc., are used. The note for Horizontal Ladder applies to Oblique, Vertical and Swinging Ladder as well.

## SEQUENCE OF EXERCISES.

A. and B.-Hor. Bar.
A. and B.-Trapeze, Rings.
A. and B.- (St. Poles) Sw. Poles, Parallels.

1-4-Giant Stride.
Ca. $1-7$-Hor. Bar, Trapeze, Rings, (St. Poles). Sw. Poles, Hor., Obli. and Vert. Ladder.
I.-(Trapeze) Rings.

5-10-Giant Stride.
L. I-9-(Trapeze) Rings.

11-14-Giant Stride.
L. ( $\mathrm{I}-6$ of Rings) -Sw. Poles.

15-20-Giant Stride.
D.-Hor. Bar (Trapeze).

1-17-Parallels.
K.-(St. Poles) Sw. Poles.
J. 1-4-Rings.
J. - (St. Poles) Sw. Poles.
J. IO-I4-Rings.

18-23-Parallels.
L. 1-4-Sw. Poles.
L. 5 -ro-Sw. Poles.
(E. and F.-on Hor. Bar, St. Poles, Trapeze. Rings. Sw. Poles.)
1-1 I-Side Horse.
21-24-Giant Stride.
L. ro-r I-Rings.

12-15-Side Horse.

16-2I-Side Horse.
r-3-Buck and Long Horse.
4-II-Buck and Long Horse.
25-Giant Stride.
L. 12-Rings.

15-20-Buck, Long Horse.
22-28-Side Horse.
12-14-Buck and Long Horse.
i-I2 (hands moving alt.) -Horizontal Ladder.
29-35-Side Horse.
I-4-Oblique Ladder.
5-7 (descending) -Oblique Ladder.
${ }^{13}$-19-Oblique Ladder.
Ca. 8-I 5-Hor. Bar.
Cb . and Cc.-Hor. Bar.
I-I2 (hands moving together)-Hor. Ladder.
13-14-Hor. Ladder.
5-7 (ascending) -Oblique Ladder.
8-12-Oblique Ladder.
93-102-Parallels.
21-27-Buck and Long Horse.
28-32-Buck.
33-5 I-Buck and Long Horse.
20-27-Oblique Ladder.
36-44-Side Horse.
r-Io-Vertical Ladder.
Ga. 1-3-Hor. Bar.
X. I-3-Hor. Bar.

I-9-Swinging Ladder.
26-30-Giant Stride.
ro3-109-Parallels.
10-15-Swinging Ladder.
J. 5-9-Rings.

30-48-Parallels.
52-65-Buck and Long Horse.
24-29-Parallels.
52-56-Side Horse.
49-54-Parallels.
45-51-Side Horse.

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55-62-Parallels.
X. 4-9-Hor. Bar.

57-61 - Side Horse.
62-65-Side Horse.
66-68-Side Horse.
Ca. 16-18-Hor. Bar.
X. ro-Hor. Bar.

3I-35-Giant Stride.
H. 1-2-Hor. Bar.

66-7 - -Buck Long Horse.
G. and H.-(St. Poles) Sw. Poles.

63-66 -Parallels.
67-69
$110-118$
I19-I29-"
r30-134 - "
70-77 - "
78-86 - " "
87-92 -"
69-71 - Side Horse.
72-81-
82-85-

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