

CATALOGUE

OF

MODELS AND SPECIMENS.



FIRE :—

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| Lucifer Matches,..... | { of wax.
of wood. |
| Burning Glasses,..... | { telescope lens.
eye glass, (convex).
pair of spectacles, (convex). |
| Sulphur Matches, or bits of stick
with their ends dipped in sulphur. | { sulphur melted on a hot pebble.
do. in a bent up piece of tin.
do. in a piece of ordinary paper. |
| Fire Sticks, | { drill bow and string.
drill stick of oak
fire block of mulberry.
do. of ivy. |
| Flints and their substitutes, | { flints.
quartz.
rock crystal.
granite.
other siliceous stones.
porcelain, various specimens. |
| Steels and their substitutes, | { steels.
pyrites.
case hardened iron.
clay or loam mould for making it.
animal charcoal, do. |
| Tinders :—1st. Those which are not
convenient to hold,
and which there-
fore require a tin-
der box. | { grass, &c., wetted in the mouth, and rubbed
with gunpowder, and having grains of
gunpowder scattered about it.
cotton wool; (when charred all the better).
tinder of burnt rag, and how to make it in
the open field.
touchwood. |

Tinders :—2nd. Those that require no tinder box, but admit of being held between the finger and thumb together with the flint,	{ amadou. roll of cotton rag, with frayed ends. cotton wick. tin tube, convenient for holding a cotton wick and for protecting its charred end. roll of touch paper. pith, sewed in a sheath, with tube, &c., as sold in the shops.
Tinder Boxes,	{ North American, made of wood, and barrel shaped to give a good grasp to the flint. South African, brass and cylindrical, with a loose moveable bottom to push up the tinder. common leather case for holding a supply of amadou.
Saltpetre for improving tinder,	{ pure Saltpetre, and touchpaper made by rubbing it upon paper. ashes of tobacco, do.
Making a spark into a blaze by whirling, blowing, or holding up against the wind,	{ a nest ready for use, with a representation of the piece of lighted tinder inside it. materials for the nest, bark rubbed small between finger and thumb. do. grass. do. moss. do. lichen. do. a bit of string picked into oakum. do. shavings and wood scrapings. do. paper cut into very fine shreds. peat, one piece propped up nearly touching another, with the lighted tinder between. (To be blown upon, not whirled.) dry cattle dung, do. do.
Art of firemaking, shews the different sizes of sticks that must be collected or prepared, before attempting to make a fire under ordinary bivouac circumstances.	{ sticks, the size of thin lucifer matches. do. of common lead pencils. do. of the finger. do. of an inch in diameter. logs.
Bivouac Fires,	{ Ovampo plan, useful where only dry grass and brushwood is to be met with. Swedish plan, where fir trees abound. ordinary bivouac fire. boat fire place.

WATER :—

Rain water, to collect,	{ a cloth stretched by its corners with a stone to weight it down in the middle, and to direct the droppings into a cup placed below.
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- Dew water, to collect,..... { a sponge tied to a stick for gathering the drops off leaves, &c.
 { a wisp of grass to whisk them down.
- Saltwater, to distil,..... { a still made with a kettle and a bottle.
 { do. with a pot and a gunbarrel.
- Turbid water, to purify..... { Namaqua filter of a wisp of grass.
 { handkerchief thrown over a dirty puddle, to be sucked through.
 { two tubs, one of which is perforated and packed inside the other with moss, &c., between them.
 { a bottle with a hole knocked in its bottom and loosely plugged up with sponge, &c.
 { a flower pot, do. (These three last are to be plunged in the dirty water).
 { a piece of alum, amply sufficient for a bucket full of very turbid water.
 { a bottle of dirty water that has been purified by alum.
 { do. in which the mud has at length subsided of itself.
- Filtering materials,..... { sand.
 { charcoal.
 { moss.
 { grass, &c.
 { sponge.
 { flannel.
- Digging wells, { digging stick used with the hand, no other instrument being employed.
- Watering cattle from wells,..... { a trough made by laying a piece of any kind of cloth over a trench scraped in the ground.
 { raising water with a pole and bucket.
- Carrying water,..... { in an oil cloth laid in a basket.
 { in a bladder carried by help of two skewers.
 { in an intestine with a handkerchief rolled about it.
 { way of tying the ends of do. so that the string shall not cut them.
 { mending a torn water bag by plugging the hole.
 { do. by tying up the hole.
 { do., at leisure, by patching it.
 { wax for waxing over the seams of leaky water bags; tallow.

FOOD AND COOKING :—

- Cooking tents,..... { Gipsy fashion, 4 wands stuck in the ground, and blanketing skewered round them.

Cooking places,.....	{ oven of rough stones plaistered over. loam and grass dome shaped ; built in concentric rigs over a fire. meat buried under a camp fire. broiling slices between 2 large heated stones propped one above the other. soldiers cooking trench.
Portable food,.....	{ meat-biscuit. pemman. Chollet's vegetables.
Tea and Coffee,.....	{ making tea in a muslin bag when there is a kettle but no teapot. metal gauze box, commonly sold for the same purpose. grinding coffee between two stones.
Copper pots to tin,.....	{ specimens of tinned copper. materials used, viz. : SalAmmoniac, Resin, and Tin.
RAFTS AND BOATS :—	
Rafts,.....	{ way of securing logs together with a small supply of cord. do. with saplings, and without cords, when there are means of boring holes. reed float.
Boats,.....	{ way of burning out a tree. making a boat of reeds, or of the inside bark of trees, when no wood of sufficient buoyancy, or no tools are at hand. frame work for a commodious hide boat. canoes made of a single sheet of stout bark turned inside out.
Caulking seams,.....	{ materials used—old canvas. do. inner bark of trees. do. cord picked into oakum. do. grass, moss, &c.
CATTLE AND HARNESS :—	
Enclosures, &c.,.....	{ a kraal of bushes for sheep or oxen. (for picketing horses, see ways of securing tent ropes).
Breaking in,.....	{ a nose stick and bridle for an ox. an ox packed, and with his nose bridle properly put on and secured.
Harness, &c.,.....	{ pack-saddles—the “ trees ” made by lashing straight sticks crosswise. do. do. by sticks naturally curved and lashed lengthwise. a loop of tough wood as a substitute for iron packing rings. model shewing one half filled sack properly packed, and another one badly packed.

Vehicles,..... { sledges made of a forked branch.
 { Indian horse trail.
 { Indian dog trail.

WAYSIDE ARTS & DEVICES:—

Lifting Heavy Weights..... { alternate levering of ends and building
 beneath.
 { combined force of boughs bent down.
 { rude windlass of ropes or thongs, and 3
 short poles.

Hides, &c.,..... { way of smoking small dressed skins, to
 make them resist wet.

Sinews and Intestines,..... { sinews made into thread.
 { way of making catgut.
 { do. of thread from inner membrane of in-
 testine.
 { bone awl for cobbling with.

Horns, Feathers, Hair,..... { horn that has been shaped after softening
 it in hot earth, as in that beneath a camp
 fire, or in hot ashes.
 { pens made from raw quills, by dipping in
 hot sand as above.
 { horse hair, its preparation for stuffing
 saddles, beds, &c.

Candles,..... { a strip of rag dipped into melted fat and
 wound round a cleft stick; it burns an
 inch a minute.

Soap making,..... { materials used, viz. :—ashes and fat.
 { soap half made in its pot.

Lead castings by means of paper
 moulds placed in the ground, { metallic lead pencils.
 { tablets of lead for writing or punching
 notices and inscriptions.
 { slugs and shot (tables minced into squares,
 or rods into segments).
 { lamps, inkstands, or other hollow vessels.

Blacksmith Work,..... bellows made out of a goat-skin.

Carpentry, { felling trees, and shaping them with fire.
 { seasoning green wood in a single night.

Guns, { to set a common gun as a spring gun.
 { a very useful gun pricker and nipple charger,
 made with two quills, a stick, and a
 needle.
 { guns, to sleep with when danger is urgent,
 . (see Bivouac).

- Marking the Track, { blazing trees to show the way.
knotted twigs.
small piles of stones.
gipsy paterans, viz. :—handsfull of grass.
do., a cross on the road with the long
arm as a pointer.
do., a twig laid in the cleft of a stick,
planted against the hedge on the left
hand of the way side, to be felt for on
dark nights.
- Signals, { a looking glass capable of flashing sun
signals to a distance of ten miles, and
prepared for use by having a hole cut
through the back of its case, and an eye-
hole scraped in its silvering.
- Knots, { clove-hitch for a firm hold, very difficult to
loosen.
timber-hitch, for a secure hold while the
strain is on, but which can be instantly
thrown off on slackening.
bowline, for tying loops, or for tying two
loose ends together.
knotting leather thongs together.

ENCAMPMENTS :—

- Bivouac, { between blankets in a heap of cut heather.
sleeping bag reaching to armpits, stuffed
with dry grass, &c.
ordinary sleeping bag.
way of making a matrass.
sleeping with gun by side when danger is
urgent.
- Screens, { common screen of leafy boughs, &c.
turf turned up on edge.
cloth spread as an awning.
substitute for uprights, a faggot of sticks,
a musket.
boughs laid on a rude prop of poles.
wigwam.
gipsy tent.
- Huts, { framework of a common hut.
inner bark used as string in making it.
half hut, plastered over.
whole hut, do.
do. do., raised on walls.
reed hut.
common underground hut.
Kamstchatchan jourta.
log hut.

Different kinds of walls for huts,....	{	wattle and dab. straw and reed walls. tarpaulin painted cloth. skins. boards hitched together, Malay fashion. reeds, do. do. do. double hitch. mat of reeds; the simplest form of bush loom. palisading. turf walls. sundried bricks. rough stone walls. bricks of peat.
Roofing,	{	shingles of wood. bark. rude thatching.
Floors,.....	{	clay. wood-ashes and cowdung. paving.
Windows,	{	shaping glass with a key. waxed cloth. intestines.
Tent ropes to secure in bad holding ground,.....	{	bushing tents. tying tent ropes to trees. weighting with stones, &c. backing tent pegs. objects to be buried a foot deep, viz. sticks. do. faggot of brush wood. do. a moderate sized stone. do. a handkerchief or cloth filled with sand.
Pitching Tents,.....	{	regimental tent pitched in inclement weather, viz., sunken floor, low wall round, guy ropes, and double drain. regimental tent raised on walls; useful in hot climates.
Tent Pole, to mend, replace or lengthen	{	way of securing two poles together by means of a "wolding stick." three poles tripod fashion, instead of one centre one. rope carried down from the overhanging limb of a tree.