These penetrating finishes are especially good for amateurs to use in finishing furniture. They are easy to apply, quick drying and do not collect dust when drying. When correctly done, the finishes have good resistance to moisture, heat, alcohol, acids and scratches. They become part of the wood rather than build up on the surface. If there are worn places, the sealer finish can be repaired without apparent lapping of the patched area.

A well-finished piece of furniture will have an even, satin patina throughout. It neither shines or glistens, but has a mellow sheen of older pieces.

The penetrating wood sealer is much like an oil finish, except that it does not require the rubbing.

**PENETRATING WOOD SEALER**

In selecting a sealer, be careful to read labels and follow the manufacturers' instructions. Determine your needs and select a sealer that fulfills the requirements. For example, a sealer which is resistant to heat and cold is recommended for table tops. Use a varnish-type sealer of thin consistency for furniture. There are two types available—those containing varnish and those with wax. They are made in thin, medium and heavy consistency.

**Equipment**
- penetrating wood sealer (thin type)
- old nylon stocking
- tack rag
- 3/0 steel wool
- clean lintless cloth

**Procedure**
- Apply 12 hours after smoothing wood or 24 hours after applying stain.
- Wipe off surface with dry cloth and then a tack rag.
- Have sealer, wood and room at least 70° for best results.
- Strain sealer each time it is used. This can be done by stretching a nylon hose over the top of the open can. Dip a clean lintless cloth into sealer that came up through the hose.
- Apply sealer with cloth to one section at a time in a circular motion.

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• Work across the grain.
• Immediately wipe off all surplus sealer before applying sealer to next section. Wipe with grain.
• Apply to each section until entire surface is covered.
• Rub sealer in with the hands. This helps penetration and removes air bubbles.
• Apply to chair rungs one at a time.
• Allow to dry 24 hours – 36 hours or more if surface is at all sticky.
• Buff gently with 3/0 steel wool when dry.
• Wipe surface with a dry cloth, then with a tack rag.
• Apply succeeding coats – 9 to 21 if a beautiful resistant finish is desired.
• Allow final coat to dry 1 week.
• Do not allow a layer of sealer to pile up on wood surface. Always remove excess.

FINAL RUB – PUMICE AND OIL

Equipment
• FFFF powdered pumice stone
• 1 pint of lightweight mineral, linseed, paraffin or lemon oil
• old spoon
• heavy felt pad or wool cloth
• saucer for oil
• brush to remove pumice from crevices

Procedure
• Mix the pumice and oil to thin cream consistency.
• Stir during use.
• Rub on with hands in the direction of the wood grain until a smooth even luster is obtained.
• Rub all parts equally to develop even finish.
• Large surfaces can be sprinkled lightly with pumice and rubbed with a pad, heavy cloth or blackboard eraser dipped in saucer of oil. Rub with the wood grain.

• Wipe off with cloth moistened in oil, then with dry cloths until an even luster is obtained.
• Clean pumice from cracks with a brush.

OIL FINISH

Linseed oil finish not only is considered by many as the most beautiful finish, but also the least expensive, simplest and oldest. It requires a good deal of patience, time and energy to apply the many coats and much rubbing is needed to give a good finish.

Oil finish is recommended for woods with good color and grain such as walnut, pecan, oak, teak, etc., and is especially desirable for furniture that may be subject to hard use. No stain or filler is required with this finish and if sufficiently oiled and rubbed it needs no waxing.

Elaborately carved woods should not be given the oil finish since oil is difficult to remove from crevices and will harden like varnish.

Equipment
• lintless cloths
• mixture: \( \frac{2}{3} \) boiled linseed oil and \( \frac{1}{3} \) turpentine
• polishing cloth (felt or closely woven blanket)
• tack rag
• 3/0 steel wool

Procedure
• Smooth surface, wipe with lintless cloth and then with a tack rag.
• Heat oil mixture in double boiler (never directly over heat because of flammability). Hot oil penetrates more quickly than cold.
• Apply with lint-free cloth to plain surfaces.
• Rub oil into wood with the hands until wood will absorb no more oil. The warmness of hands also will help penetration.
• Apply cold oil to carved parts because hot oil may set too quickly.
• Wipe away all traces of excess oil with a clean cloth.
• Remove all oil traces from carved parts by using sharp objects wrapped with soft cloths. If surface becomes sticky, remove oil with turpentine or varnish remover.
• Rub entire surface with polishing cloth for about 10 to 20 minutes.
• Allow 24 to 36 hours drying time before applying another coat. If temperature conditions are humid, a week's drying time may be necessary. The surface will feel oily if it is not dry.
• Buff lightly with 3/0 steel wool when dry.
• Wipe surface with clean cloth, then with a tack rag.
• Repeat process as many times as desired (up to 20 or more times).
• Finish with pumice and oil; then buff with steel wool. (See FINAL RUB – PUMICE AND OIL in this publication)

• Repeat oiling once or twice a year to keep furniture from drying out.
• Oil undersides as often as outer surfaces to prevent warping.

CAUTION: Oil rags are COMBUSTIBLE. Wash or destroy them immediately.

References
Agricultural Extension Service, Louisiana State University; "Refinishing Furniture – Using Oil Stains and Penetrating Seals;" Publication 1409; November 1964.
Agricultural Extension Service, University of Arkansas; Fayetteville, Arkansas; “Refinishing Furniture;” Circular 478; Revised October 1967.
Cooperative Extension Service, Ohio State University; Columbus, Ohio. “Finishing Furniture—Old and New;” Bulletin 456; October 1965.
Cooperative Extension Service, University of Missouri; Columbia, Missouri; “Cleaning May Restore Furniture;” May 1970.

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