The invention relates to the preparing and 
retting of flax fiber bearing plants to remove 
therefrom the gum or gumming matter 
contained in the plant.

According to the invention the treating or 
retting is effected by subjecting the fiber in 
the form of rove to the action of yeast and/or 
other fermenting bacteria in a liquid bath 
with or without dilutions of acids such as 
sulphurous acid or compounds or extracts of 
sulphur. The ferment may be carried out at 
a temperature of 70° to 80° F.

As applied to flax grown for fiber, the 
fiber prior to retting is spun or twisted into 
a rove and the rove is immersed in water 
containing yeast (with or without other 
substances) and/or aerobic or an aerobic 
bacteria. The rove may be wound in an open 
state on to a reel fitted or mounted upon a 
rove bobbin or other support. Or it may be 
treated in bank form or wound on a bobbin 
perforated or otherwise or the rove may be 
drawn through a trough or vat containing 
water and yeast on its way to a spinning 
frame.

As applied to flax grown for seed the plant 
is after drying with heat threshed and carded 
in the same machine being deseeded and the 
woody material removed at the same opera-
tion and the fiber therefrom carded or rubbed 
into a sliver and twisted into a rove and the 
rove so formed retted in a solution of yeast 
or other ferments as above described.

In either case the rove may be subsequently 
boiled or bleached if desired and after retting 
it may be treated with a preservative such as 
a tar product to prevent further fermentation. 
This rove so retted may be placed in the 
creel of a spinning frame and drawn through 
the trough and spun in the usual way or 
dried and softened and spun on dry spinning 
frame.

The retting by means of yeast is carried 
out in a bath of from 70° to 80° F. and will 
produce alcohol in such quantities as may 
form a profitable by-product.

What we claim as our invention and desire 
to protect by Letters Patent is:

1. Process for retting flax consisting in 
spinning the fiber into a rove and immersing 
the rove in water containing yeast.

2. Process for retting flax consisting in 
spinning the fiber into a rove and immers-
ing the rove in water containing yeast and 
sulphurous acid.

3. Process for retting flax consisting in 
spinning the fiber into a rove and immers-
ing the rove in water containing yeast, other 
fermenting bacteria and sulphurous acid.

4. Process for retting flax consisting in 
spinning the fiber into a rove and immersing 
the rove in water at a temperature of 70° to 
80° F. containing yeast, other fermenting 
bacteria and sulphurous acid.

In testimony whereof we have hereunto set 
our hands.

MARTIN WADDELL
HENRY COWAN WATSON.